S. HRG. 107–997

PROTOCOL ON PERSISTENT ORGANIC POLLUTANTS (POPs) IMPLEMENTATION ACT

HEARING

BEFORE THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE

ONE HUNDRED SEVENTH CONGRESS

SECOND SESSION

ON

S. 2118, A BILL TO AMEND THE TOXIC SUBSTANCES CONTROL ACT AND THE FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT TO IMPLEMENT THE STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANTS AND THE PROTOCOL ON PERSISTENT ORGANIC POLLUTANTS TO THE CONVENTION ON LONG-RANGE TRANSBOUNDARY AIR POLLUTION

MAY 14, 2002

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PROTOCOL ON PERSISTENT ORGANIC POLLUTANTS (POPs) IMPLEMENTATION ACT

TUESDAY, MAY 14, 2002

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Washington, DC.

The committee met, pursuant to notice, at 9:37 a.m. in room 406, Senate Dirksen Building, Hon. James Jeffords (chairman of the committee) presiding.

Present: Senator Jeffords.

OPENING STATEMENT Of HON. JAMES M. JEFFORDS, U.S. SENATOR FROM THE STATE OF VERMONT

Senator JEFFORDS. Good morning. We have had a little difficulty getting started on this hearing. I would like to thank our witnesses, several of whom flew from great distances twice to participate in today's hearing, and we appreciate that.

I am sorry that we did not receive the consent required from the minority leader to proceed last Thursday. I know it meant a great deal of expense and inconvenience for several of you, and therefore I greatly appreciate your dedication for coming here today.

This committee has an important task before it. Last May, the United States signed the Stockholm Convention on Persistent Organic Pollutants, otherwise known as the POPs Convention. The Senate now has two jobs—to pass this treaty, as well as the LRTAP POPs Protocol, and the Rotterdam Convention on Prior Informed Consent, and to pass corresponding implementing legislation. This committee must craft the implementing legislation that will allow the United States to domestically fulfill its obligations under these treaties. Passage of these treaties is not in dispute.

After reviewing the Administration's implementing legislation, it seems the disagreement centers on whether we implement the POPs Convention in its entirety. The POPs Convention is a landmark agreement that has brought the international community together to protect human health and the environment. The initial goal of the convention is to phaseout the dirty dozen. These 12 pesticides and industrial chemicals and other POPs resist degradation. They are toxic to humans and also wildlife, and travel across international boundaries.

Currently in the United States, registration for 9 of the 12 POPs have been canceled, and the manufacture of PCBs have been banned. However, other countries still use these substances. They come back to us on our food, in our water, and through our air. These POPs create a circle of pollution requiring a global solution,

and it is a solution that the United States has embraced. President Bush stated that the POPs Convention is an example of "the way environmental policy should work." I agree with the President, and that is why I am perplexed by the Administration's POPs implementing proposal.

In addition to eliminating the dirty dozen, the Convention provides process for the nomination, assessment and addition of future POPs. This is important to understand. The POPs Convention was not intended to be a static agreement. The United States made an international commitment to eliminate all current and future POPs. The adding mechanism, that is, a mechanism to add POPs beyond the dirty dozen, has never been disputed. In fact, LRTAP includes four additional POPs. Since LRTAP served as a precedent for the POPs Convention negotiation, it is reasonable to assume that the four POPs will be considered as next likely additions to the POPs Convention.

Industry, environmentalists, public interest organizations and a bipartisan, bicameral group of congressional members have joined the Bush administration in supporting the swift Convention ratification of POPs. I expect to hear support for an adding mechanism from all of our witnesses at today's hearing.

My legislation, the POPs Implementation Act of 202, mirrors the POPs Convention. Like the Administration's proposal introduced by Senator Smith, my bill seeks to amend TSCA and FIFRA, for example. Both bills provide EPA with the authority to prohibit the manufacture of POPs for export. However, only the legislation I have introduced takes the next step. It provides a process consistent with the POPs Convention for listing additional chemicals. The Administration proposal fails to include this mechanism.

I am concerned about the omission of the adding mechanism and demonstrations of unwillingness to fulfill the U.S. commitment to the POPs Convention, and it would severely slow down any future attempt to eliminate toxics. The Administration is proposing that the United States once again take the easy way out with respect to our international environmental commitments. If we follow the Administration's example, we will be perceived by the international community as withdrawing from our commitments.

I look forward to working with the Administration and my colleagues to pass legislation that completely implements the POPs Convention, as well as LRTAP and PIC. Otherwise, there will be lengthy delays in the addition of additional problems.

Our first panel, first witness is Jeffry Burnam. Jeffry Burnam is Deputy Assistant Secretary for the Environment at the State Department. From 1981 to 2001, he served on the professional staff of the U.S. Senate, working on energy, environmental and forestry issues for Senator Lugar and for the Senate Committee on Agriculture, Nutrition and Forestry. From 1979 to 1981, he was the Research Director of the House Republican Task Force on Government Regulation, and Legislative Assistant also to Congressman Mickey Edwards. Welcome back, Mr. Burnam.

[The prepared statement of Senator Jeffords follows:]

STATEMENT OF HON. JAMES M. JEFFORDS, U.S. SENATOR FROM THE STATE OF VERMONT

Good morning. I would like to thank our witnesses, several of whom flew from great distances twice, to participate in today's hearing. I am sorry that we did not receive the consent required from the Minority Leader to proceed last Thursday. I know it meant a great deal of expense and inconvenience for several of you. Therefore, I greatly appreciate the dedication that has ensured your presence here today.

This committee has an important task before it. Last May, the United States signed the Stockholm Convention on Persistent Organic Pollutants, otherwise known as the POPs Convention.

The Senate now has two jobs: to pass this treaty, as well as the POPS Protocol to the Convention on Long-Range Transboundary Air Pollution (LRTAP), and the Rotterdam Convention on Prior Informed Consent (PIC); and to pass corresponding implementing legislation. This committee must craft the implementing legislation that will allow the U.S. to domestically fulfill its obligations under these treaties.

Passage of these treaties is not in dispute. However, after reviewing the Administration's implementing legislation, it seems the disagreement centers on whether we implement the POPs Convention in its entirety.

The POPs Convention is a landmark agreement that has brought the international community together to protect human health and the environment. The initial goal of the Convention is to phaseout the "dirty dozen." These 12 pesticides and industrial chemicals and other POPs resist degradation, are toxic to humans and wildlife, and travel across international boundaries.

Currently in the United States, the registrations for 9 of the 12 POPs have been canceled; and the manufacture of PCBs has been banned. However, other countries still use these substances.

They come back to us on our food, in our water, and through our air.

These POPs create a circle of pollution requiring a global solution. The POPs Convention provides this solution. And it is a solution that the United States has embraced. President Bush stated that the POPs Convention is an example of "the way environmental policy should work." I agree with the President. That is why I am perplexed by the Administration's POPs implementing proposal.

In addition to eliminating the "dirty dozen," the Convention provides a process for the nomination, assessment, and addition of future POPs. This is important to understand. The POPs Convention was not intended to be a static agreement. The United States made an international commitment to eliminate all, current and future, POPs.

The "adding mechanism"—that is, a mechanism to add POPs beyond the "dirty dozen"—has never been disputed. In fact, LRTAP includes four additional POPs. Since LRTAP served as the precedent for the POPs Convention negotiations, it is reasonable to assume that these four POPs will be considered as the next likely additions to the POPs Convention. Industry, environmentalists, public interest organizations, and a bipartisan, bicameral group of congressional members, have joined the Bush administration in supporting swift Convention ratification. I expect to hear support for an "adding mechanism" from all our witnesses in today's hearing.

My legislation, the POPs Implementation Act of 2002 (S. 2118), mirrors the POPs Convention. Like the Administration's proposal introduced by Senator Smith, my bill seeks to amend the Toxic Substances Control Act (TSCA) and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). For example, both bills provide the Environmental Protection Agency with the authority to prohibit the manufacture of POPs for export.

However, only the legislation I have introduced takes the next step. It provides a process, consistent with the POPs Convention, for listing additional chemicals. The Administration proposal fails to include this mechanism.

I am concerned about the omission of the "adding mechanism." It demonstrates an unwillingness by the Administration to fulfill the U.S. commitment to the POPs Convention. And it would severely slow down any future attempt to eliminate toxics.

The Administration is proposing that the United States, once again, take the easy way out with respect to our international environmental commitments. If we follow the Administration's example, we will be perceived by the international community as withdrawing from our commitment.

As a major producer of persistent, biological toxics, the United States has a responsibility to lead the world in eliminating known deadly pesticides and chemicals, as well as those yet to be manufactured.

And we have a responsibility to our own citizens.

Last week, I received a compelling letter from Alaskan Governor Tony Knowles. Polychlorinated biphenyls (PCBs), one of the 12 POPs, are not produced in Alaska.

Yet, they are discovering low levels in the Arctic. Alaskan natives now fear the threat PCBs pose to their subsistence foods.

Governor Knowles agrees with me; he is concerned about a lengthy administrative and legislative process for adding future POPs.

I look forward to working with the Administration and my colleagues to pass legislation that completely implements the POPs Convention, as well as LRTAP and PIC.

STATEMENT OF JEFFRY M. BURNAM, DEPUTY ASSISTANT SECRETARY FOR ENVIRONMENT, BUREAU OF OCEANS AND INTERNATIONAL, ENVIRONMENTAL AND SCIENTIFIC AFFAIRS, DEPARTMENT OF STATE

Mr. BURNAM. Thank you, Senator.

I would like to thank the committee for inviting me here today to speak about three treaties—each of which the Administration supports. These treaties are the Stockholm Convention on Persistent Organic Pollutants, better known as the POPs Convention; the POPs Protocol to the Convention on the Long-Range Transboundary Air Pollution, known as the LRTAP POPs Protocol; and the Rotterdam Convention on Prior Informed Consent, known as PIC.

With your permission, I have a written statement that I would like to submit for the record.

Senator JEFFORDS. It will be accepted without objection. Thank you.

Mr. BURNAM. The Stockholm POPs Convention aims to protect human health and the environment from 12 chemicals that are of particular concern. They are of particular concern because they have four intrinsic characteristics. Namely, they are toxic, they have the potential to bio-accumulate, they are stable, and thus resistant to natural breakdown, and they can be transported over long distances. The POPs Convention has been submitted to the Senate for advice and consent, and the Administration looks forward to working with the Senate to help ensure its early ratification.

POPs are capable of impacting human health and the environment far away from where they are released, including across national borders. POPs can have impacts in areas all over the United States, but have been a particular concern in Alaska and the Great Lakes region. I also understand, Senator, they are of concern in Lake Champlain as well, as you probably know. These chemicals have been linked to adverse human health effects. Those effects include cancer, damage to the nervous system, reproductive disorders, and disruption of the immune system.

As you pointed out, Senator, these 12 chemicals are banned, severely restricted or controlled in the United States, but they are still used abroad in many places. Because they are capable of long-range transport, a global treaty to address their human health and environmental effects is needed, and was sought by the United States. You are fortunate, Senator Jeffords, to have in the room today many of the people who worked on this treaty, including my predecessor Brooks Yeager who did an outstanding job of completing its negotiation.

I have been to a number of international meetings, and when the EU, the G–77 and the United States and what is known as the

JUSSCANNZ nations (Japan, United States, Switzerland, Canada, Australia, Norway, and New Zealand) can agree on something, it is not a small matter. This, as you also know, is an outstanding example of industry and environmental cooperation. We have representatives from the organizations that worked on the treaty, as well as Mr. Buccini, who did an outstanding job, I understand, as chair.

The POPs Convention addresses two types of pollutants—intentionally produced POPs such as DDT or PCBs, and unintentionally produced POPs such as dioxins and furans. For intentionally produced POPs, the Stockholm POPs Convention prohibits their production and use. There are certain exemptions. The only general exemption is for the use of DDT for malaria control. However, the Convention does allow countries to seek a special exemption if they need to for 5 years for certain uses that they might view as being essential. The Stockholm Convention bans trade in POPs among parties, except that parties may still import POPs for environmentally-sound disposal. For unintentionally produced POPs, the POPs Convention requires countries to develop national action plans.

Under the POPs Convention, parties must take appropriate measures to ensure that POPs wastes are managed in an environmentally sound manner. Recognizing the needs of developing countries in managing POPs, the POPs Convention includes a flexible system of financial and technical assistance, by which developed countries will help developing countries meet their POPs obligation.

Finally, the Convention includes a science-based procedure to govern the inclusion of additional chemicals to the Convention, including a statement of the criteria that these chemicals must meet, and a list of various risk management factors. However, the United States does not yet know the manner in which the risk management factors involved will be weighed when applied to additional chemicals.

The implementing legislation also permits the United States to become a party to two additional agreements. The first agreement, closely related to POPs, is the LRTAP Convention. This is a regional agreement negotiated under the auspices of the United Nations Economic Commission for Europe, which includes the United States, Canada, Europe and the former Soviet Republics. The other agreement is the Rotterdam Convention on Prior Informed Consent. The Rotterdam Convention stipulates that the export of certain especially hazardous chemicals can only take place with the prior informed consent of the importing country.

Together, these three treaties address a number of chemical management problems faced by the international community. They enjoy broad support from the public, from environmental and industry organizations, and from many Members of Congress with whom we have been in contact. I would like to thank you, Senator Jeffords, as well as Senator Smith, for your firm support and keen interest in these treaties. All of these agreements benefit the health and welfare of citizens of the United States and people all over the world.

Mr. Chairman, I would be pleased to answer any questions that you may have.

Senator JEFFORDS. Thank you for an excellent statement.

Our next witness is Stephen Johnson. Stephen Johnson is the Assistant Administrator for the Office of Prevention, Pesticides and Toxic Substances at the Environmental Protection Agency. OPPTS is responsible for implementing the Nation's pesticide, toxic substances and pollution prevention laws. Both of the domestic statutes that are implementing legislation seeks to amend would come under the jurisdiction of this Office.

Mr. Johnson, thank you for your participating today, and please proceed.

STATEMENT OF STEPHEN L. JOHNSON, ASSISTANT ADMINISTRATOR, OFFICE OF PREVENTION, PESTICIDES, AND TOXIC SUBSTANCES, U.S. ENVIRONMENTAL PROTECTION AGENCY

Mr. JOHNSON. Good morning, Mr. Chairman, and thank you very much for the opportunity and invitation to appear before you today.

With your permission, I would like to submit my written testimony for the record.

Senator JEFFORDS. Without objection, it is accepted.

Mr. JOHNSON. Thank you.

It is my privilege to represent the U.S. Environmental Protection Agency and to discuss the Administration's legislative proposal on three international environmental agreements. Let me first say that the Bush administration is firmly committed to working closely with all members of this committee and the U.S. Senate to ensure quick enactment of the implementing legislation and subsequent ratification and/or approval of these international agreements negotiated by the previous Administration. We stand ready to work with you to craft legislation that tracks supervision of these agreements, and are committed to ensuring that the United States retains our current position as a world leader in chemical environmental safety.

As Mr. Burnam has explained, there are three agreements we are here to discuss: the Stockholm Convention on Persistent Organic Pollutants, known as the global POPs treaty; the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, known as the PIC Convention; and the Protocol on Persistent Organic Pollutants negotiated under the U.N. Economic Commission for Europe's Convention on Long-range Transboundary Air Pollution, also known as the LRTAP POPs Protocol.

Here in the United States, we have already taken extensive steps to address risks posed by the substances covered by these agreements. But as we all know, stand alone action by one country is not enough. As Mr. Burnam explained earlier, these chemicals continue to pose real health risks to U.S. citizens and to the people around the world. They are used and released in other countries and travel distances from their source.

In the United States, these agreements are of particular importance to the people of the environment of Alaska, the Great Lakes region, which are unfortunately impacted by POPs transported by air and by water from outside these States. This is particularly

true for Alaska Natives, who rely heavily on traditional diets comprised of fish and wildlife. By joining with the rest of the world to phaseout and reduce these toxic pollutants, we will help to protect the health and the environment, not only of our fellow Americans, but of all those who share our planet.

As mentioned, we take the threats posed by these pesticides and chemicals to our environment and public health very seriously. For example, the United States was the first country to begin a thorough scientific reassessment, or if you will, re-registration program for pesticides and to evaluate cumulative risk posed by pesticides. Across the world, the United States is considered an international model for sound scientific risk assessments and effective regulatory decisionmaking. Our actions are respected and often replicated in other countries across the globe.

We have implemented a series of aggressive approaches for mitigating and subsequently reducing exposure to POPs chemicals. For example, EPA developed national action plans for persistent bioaccumulative and toxic chemicals, or PBTs as they are known, a number of which are POPs chemicals. These comprehensive plans focus on Federal, State and local efforts to reduce emissions to and exposures to PBTs, with an emphasis on prevention. Many of these national action plans have already been reviewed and commented on in the public, and are in the process of being finalized. Many of the action plans will implement innovative and voluntary partnership activities.

The Administration's legislative proposal provides targeted changes to the Toxic Substances Control Act and the Federal Insecticide, Fungicide and Rodenticide Act in order to track the provisions of these three agreements. Because these agreements are largely consistent with existing U.S. law and to ensure expeditious approval of these agreements, only narrowly targeted adjustments to FIFRA and TSCA are necessary for the United States to implement our obligations under them.

For the POPs chemicals, the legislation would prohibit any production, use, processing, distribution and commerce, and disposal operations that may be inconsistent with treaty obligations. It also contains provisions for specific exemptions from the prohibition, such as those needed for research purposes consistent with the agreements.

The Administration's legislative language directly tracks obligations in the PIC Convention, effectively controlling the international trade of toxic chemicals and pesticides through export notification, export controls and labeling. With these provisions, the United States will be able to effectively and expeditiously implement this important Convention.

As you know, the legislation does not include provisions to address the listing of additional chemicals under the global POPs and LRTAP POPs. Such a provision is not required to bring the United States into compliance with these agreements. I want to stress that the Bush administration is fully committed to the listing of additional chemicals to the POPs agreements, using the science-based listing process outlined in the global POPs treaty and ratifying amendments that list appropriate chemicals.

In fact, that is why the Administration's legislative draft contains information collection provisions. These provisions will ensure that the United States is as informed as possible of the risks, benefits, production and uses and other pertinent factors concerning candidate chemicals when negotiating amendments to add future chemicals. The Administration believes the processes set forth in the POPs Convention and the LRTAP Protocol for listing chemicals are rigorous and science-based. We are confident that they will identify strong candidates for listing, based on a rigorous scientific risk assessment.

However, the parties must still work through details of a decision process for evaluating cost and other information for listing additional substances under the POPs. At this time, we do not have enough experience with how, after a decision that a chemical meets the scientific standard for listing, the international community will weigh and balance socioeconomic and other factors when making final listing decisions, and deciding on appropriate control measures for the chemical.

Recognizing that a provision to address the listing of additional chemicals is not required to bring the United States into compliance upon entry into force of these agreements, the Administration determined that it would be best to consider these issues in the context of an evolving detail POPs listing process. The experience gained at the negotiating table over the next several years on how the international community chooses to evaluate socioeconomic and other factors when shaping control actions for future listings will be of great value. We stand ready to work with you on this important issue.

The Administration would also like to recognize you, Mr. Chairman, and Senator Smith, for your significant efforts to support the global POPs Convention and the LRTAPs Protocol. Administrator Whitman and I are committed to working with you, Senator Smith, all members of the committee, and Congress in general to ensure expeditious enactment of the best legislation possible to implement the POPs, PIC, and LRTAP agreements.

The Administration is seeking swift approval of these agreements. We believe the Stockholm Convention may come into force soon, and it is important that the United States be a full participant at that time so we can play a strong role from the outset of the Convention. It is especially important to be at the table as a party when crucial early implementation decisions are being made, and when parties, including the United States, submit proposals to add new chemicals to the global POPs and LRTAP.

The United States would like to demonstrate its ongoing commitment to the goals of this important treaty, and by our example encourage other countries to ratify the Convention. I am very proud of the POPs treaty because it provides a perfect example, as you have stated, of how industry and environmental interests have worked together to resolve serious environmental issues. These agreements illustrate how much we can accomplish when people can come together in support of common environmental goals.

Thank you for the opportunity to discuss these international agreements this morning. Again, I want to thank you for your support and assure you that President Bush, Administrator Whitman

and I are looking forward to working with you and the committee to approve these important agreements and finalize the implementing legislation.

I would certainly be pleased to answer any questions.

Senator JEFFORDS. Thank you both for excellent statements. I will have a few questions for the record here.

Mr. Burnam, U.S. negotiators agreed some time ago to ban or severely restrict four additional POPs under the provisions of the LRTAP POPs Protocol. How can the Administration say that it does not know what additional chemicals are likely to be added to the POPs Convention?

Mr. BURNAM. Well, Senator, I think those four chemicals are likely candidates for addition. You have to look at the differences between LRTAP and POPs. LRTAP does not contain some of the trade and waste disposal elements that the global POPs does, but those are certainly very likely candidates for addition. I merely point out that the obligations of countries under the LRTAP proposal are somewhat narrower than they are under the global POPs Convention, so you would have to consider that in evaluating why there are 16 chemicals in one and 12 in another.

Senator JEFFORDS. Doesn't it make sense from a level playing field point of view to support global bans on chemicals we have already agreed to ban on a regional basis in the LRTAPs POPs Protocol?

Mr. BURNAM. Well, I guess I would have to refer to my previous answer. My understanding is that the LRTAP Protocol does not contain some of the trade elements of the Stockholm Convention. So it would not necessarily be the case that the two Conventions would be the same. But yes, you certainly have a point. If we were to agree to having these chemicals listed under the LRTAP Protocol, that would certainly be a strong argument for listing them under the Stockholm Convention.

Senator JEFFORDS. Thank you.

Mr. JOHNSON. Senator, if I might?

Senator JEFFORDS. Sure. Please, Mr. Johnson.

Mr. JOHNSON. If I may add to my colleague's comment, just as a reminder for all of us that LRTAP focuses on air transport, and POPs focuses on air transport, water transport and all of the other pathways. While there has been a great deal of effort looking at the air transport issues in LRTAP, there has been less international review on these other pathways—so just as a point of reference.

Senator JEFFORDS. Thank you.

Mr. Burnam, again, you have stated that you wish to have more experience with additional procedure and practices of the POPs Review Committee as part of the process of developing language to add new chemicals to the global POPs Convention. But is it not the intent of this Administration to notify at the time of positing the articles of ratification that intends to utilize the option provisions provided in the Convention?

Mr. BURNAM. I think it is likely. I will refer your question also to Mr. Johnson for a more technical answer, but yes, the United States probably will, and I would anticipate that the United States would use a provision of the Convention known as the opt-in, which the United States pushed to make a part of the Convention. Under

the opt-in provision, the United States would have to positively state that it accepted the addition of a chemical before it would be bound by that provision. In other words, you have a scientific review panel, the Convention of the parties, which by the way might meet as early as next June, a year from now, a convention of the parties would approve the chemical, and if there was controversy, could approve it by a three-fourths vote. But under the opt-in provision, the United States or any other country that exercised the opt-in provision would have to positively affirm that it had accepted the listing of that chemical.

That would be a question, then, would the executive branch make that decision? It would consult with the Senate to see whether the Foreign Relations Committee would want to hold a hearing and send that to the Senate for advice and consent. But yes, under the opt-in provision, the United States would have to affirmatively state that it had accepted the listing of that additional chemical.

Senator JEFFORDS. Mr. Johnson, a comment?

Mr. JOHNSON. Yes. I think it is some other points about the listing process for POPs that is built into both the Convention and certainly is supported by our draft legislation. That is, as a chemical comes into the listing process, the proposal is sent for scientific review. The POPs Review Committee then applies screening criteria which we are all in agreement with are scientifically sound, looking at persistence, bio-accumulation, toxicity, and long-range transport. If in fact those screening criteria are met, the committee prepares a risk profile for the chemical. It is actually at that point in our draft legislation that we then may issue a Federal Register notice asking for comment, additional information from the United States.

The Review Committee then looks at it to determine whether this risk profile actually satisfies the long-range environmental transport, and would lead to adverse health or environmental effects. If that is met, the committee prepares a risk management evaluation, getting into the cost, the benefits, the socioeconomic kinds of issues. Again, as it moves into that arena, our legislation has a provision again for asking for any comment that would help direct the United States as we move forward.

Based upon this risk profile and risk management, a recommendation is made to the conference of the parties, as my colleague has already stated, a final decision is made. There is a window of time, and I believe it is a year, that member states or in this case the United States would have the option of opting in or opting out.

So there is a great deal of process, and again just to emphasize, the risk profile arena has been a well-thought-out, science-based standard, we are all very much in agreement. It is when we get into the risk management and what criteria we will all consider for balancing the risks and benefits leading to either restrictions or a worldwide ban, that is less clear at this point.

Senator JEFFORDS. Thank you.

My final question is, doesn't this opt-in provision protect the United States from ever being forced to ban a potential POPs against its will?

Mr. BURNAM. Yes, I think it does. I think that was the purpose of it. Some treaties operate on a consensus basis, where all nations

have to agree to anything that is done under the treaty that is significant, to put it in colloquial terms. In this particular case, since there is a three-fourths vote if there is controversy, it was important to the United States to ensure that it was not bound by a decision with which it disagreed. So it put the opt-in provision in there to ensure that it would have to—and I anticipate we would exercise the opt-in provision.

There is another provision called opt-out, where you accept an additional listing simply by your silence, but under the opt-in provision, you have to affirmatively state. So we did put that in there to protect U.S. interests in the off-chance that there would be a listing with which we disagreed.

Senator JEFFORDS. Mr. Johnson, a comment?

Mr. JOHNSON. I have really nothing more to add. I guess one other specific of that, I think that another point that you might want to reference. This is with regard to the new chemicals, that at the diplomatic conference in May 2001, the member States agreed not to begin work on new chemicals under after ratification. Of course, we are hopeful that we will be a part of the 50 to ratify the Convention through this legislation.

However, it has been estimated by the POPs Convention secretariat that the listing process and going through looking at the risk management aspects of new chemicals, the times range anywhere from 3 to 6 years. So while there may be some new chemicals that people would like for the POPs Convention to consider, it has been estimated that it is going to be a number of years before those chemicals actually move through the kind of science process that is outlined in the Convention. So issues of opting in and opting out may be a little ways away.

Senator JEFFORDS. Thank you both. Sorry again we had to call you back, but glad to have you here and thank you for excellent testimony.

Mr. JOHNSON. Thank you, Senator.

Senator JEFFORDS. Now I would ask if my final five remaining witnesses would please approach and be seated. I will introduce while you are getting organized here.

Our first witness is Dr. Warren Muir. Warren is the executive director for the Commission of Life Sciences, and the executive director of the Board on Agriculture and Natural Resources at the National Research Council. From 1971 to 1977, he was a senior staff member for the Environmental Health of the Council on Environmental Quality. He was a key formulator of the Administration's proposal for TSCA. After TSCA was enacted, he served at EPA from 1977 to 1981 in various capacities associated with implementation. Welcome, Mr. Muir.

The second witness is John Buccini, a native of Winnipeg, Canada. He is the chair of the Intergovernmental Negotiation Committee established by the United Nations Environmental Program to negotiate a global POPs Convention. Prior to his election as chair in June 1998, he served in leadership roles in other international programs addressing toxic chemical issues, including the North American Commission on Environmental Cooperation, the OECD Chemicals Program, and the Intergovernmental Forum on

Chemical Safety. Thank you for traveling your long distance to be here, and we appreciate your coming twice.

The third witness is Brooks Yeager. Brooks is Vice President for the Global Threats Program at the World Wildlife Fund. Before joining WWF, he was the Deputy Assistant Secretary for Environment and Development at the U.S. State Department. At State, he was responsible for the development and negotiation of U.S. policy in a wide variety of global environmental discussions, and was the U.S. lead negotiator for the POPs Convention. Thank you for being here today.

Our fourth witness is Michael Walls. He is a senior counsel at the American Chemistry Council. Mr. Walls has been with the ACC for more than 15 years. During that time, he has counseled committees and staff on a broad range of international and domestic issues. He has represented the industry in several international negotiations including PIC and the POPs Conventions, and the Basel Convention on Transboundary Waste Movements. Thank you for coming, Mr. Walls.

Karen Perry is the deputy director of the Environment and Health Program for Physicians for Social Responsibility. She directs the SR's work on a variety of toxics issues, including POPs and other persistent bio-accumulative substances. From 1998 to 2001, she served as a Coordinator of the International POPs Elimination Network—a network consisting of more than 400 NGO's in 70 countries focused on the phase-out of POPs through a global treaty. Ms. Perry, thank you for your coming and being with us today.

We are back to Mr. Muir and ask you for your comments.

STATEMENT OF WARREN MUIR, EXECUTIVE DIRECTOR, COMMISSION ON LIFE SCIENCES, AND EXECUTIVE DIRECTOR, BOARD ON AGRICULTURE AND NATURAL RESOURCES, NATIONAL RESEARCH COUNCIL

Mr. MUIR. Thank you, Mr. Chairman.

I am happy to be here today and to present the testimony of Dr. Bruce Alberts, who is the president of the National Academy of Sciences, who was invited to testify earlier and who is unfortunately out of the country today. With your permission, I ask that his statement be entered into the record.

Senator JEFFORDS. Without objection, it is accepted.

Mr. MUIR. Because the role of the National Academy of Sciences and its affiliated institutions is to serve as a source of independent scientific, engineering and medical advice, I will limit our testimony to scientific issues and the possible involvement of our operating arm, the National Research Council, in reviewing candidate chemicals for possible future inclusions in these Conventions, starting with the general issues and moving to more specific drafting issues.

Section 107, research program to support POPs Convention, contains a provision in which EPA may enter into a contract with the National Academy of Sciences to, No. 1, develop and apply screening criteria for adding new substances or mixtures to the POPs Convention; two, to propose alternative designs for a global monitoring program aimed at identifying persistent bioaccumulative

chemical substances; and No. 3, to recommend priority chemicals for possible nomination to the POPs Review Committee of the POPs Convention. It also requests that we consider a list of specific chemicals.

With respect to the second of these, the National Academies would be able to produce an expert report recommending alternative designs for a global monitoring program aimed at identifying persistent and bioaccumulative chemical substances. Such alternative designs would be driven primarily by practical and scientific considerations.

Turning to the remaining two requests of the National Academies in the bill, according to the two Conventions, risk profiles are to be first prepared on specific chemicals. These risk profiles are then used to make decisions on adding specific chemicals to the Conventions. Final decisions on additions involve appropriately not only scientific criteria, but also policy political considerations such as the weighing of costs and benefits and other socioeconomic factors.

Because non-scientific factors are properly involved in such considerations, the National Academies are reluctant to be asked to recommend that specific chemicals be added to the POPs Convention. Rather, we propose that if asked to be involved, that the National Academies be requested to recommend scientific principles and methods for preparing risk profiles and to apply such principles and methods to prepare risk profiles with information available in the United States for chemicals listed in Section 107 of the proposed bill, as well as chemicals with similar attributes.

According to the above proposal, the Environmental Protection Agency and the U.S. Government would use the risk profiles that we developed to make decisions on what chemicals to propose for inclusion in the POPs Convention. These decisions would incorporate non-scientific policy considerations, as well as the scientific considerations that we provide.

Section 107(b) of the bill reads, "The Administrator may offer to enter into a contract with the National Academies." However, the language thereafter mandates the specifics of such a contract. We would urge that these mandates be softened to recommendations. Such softening might remove the disincentives for EPA to enter into such a contract and would allow us to work out practical arrangements.

Included in the specifics is a January 1, 2004 date for the National Academies to complete a report. We recommend that the report be described as a progress report to avoid any misinterpretation of the nature of the report. The many activities called for of the National Academies in this section cannot all be completed within 18 months or less. Furthermore, there is no specific start date for such a contract.

We suggest that the requested outcome be more than a single report. Instead, Section 107 could provide the basis for the National Academies first to provide and furnish long-term support to the U.S. Government in carrying out its responsibilities under the Stockholm Convention and the Convention on Long-Range Transboundary Air Pollution.

In sum, the National Academies, through its operating arm, the National Research Council, is prepared to assist the U.S. Government in carrying out its responsibilities under these two Conventions. To do so would entail the development of several reports providing independent scientific advice, leaving the weighing of important policy and political considerations to the government.

Thank you, Mr. Chairman.

Senator JEFFORDS. Thank you. I will have questions later, but I want everyone to have a chance of being heard. We are having a vote in about 20 minutes, which should not take very long. It is just to find out who is here, basically.

Mr. Buccini.

STATEMENT OF JOHN BUCCINI, CHAIR, INTERGOVERNMENTAL NEGOTIATING COMMITTEE ON POPS

Mr. BUCCINI. Thank you, Senator. I will try not to keep you from the vote.

I am here in my capacity as chairman of the Intergovernmental Negotiating Committee. I view my participation today primarily to respond to any questions you may choose to pose. So I would like to confine my opening remarks to a few observations about the treaty and its development. I do have a copy of my text which I am quite happy to leave with you, sir.

Senator JEFFORDS. It will be included in the record.

Mr. BUCCINI. Thank you.

The Stockholm Convention has as its objective the protection of human health and the environment from POPs. It was developed in response to an acceptance by the international community of the need to take collective global action to reduce and/or eliminate the generation and release of POPs. This acceptance was based on the recognition that the continued generation and release to the environment of POPs is not a sustainable practice, as once released into the environment, POPs undergo widespread environmental distribution through natural processes. They contaminate environmental media and living organisms, including the food chain, and persist for very long periods of time and thus pose a threat to present and future generations of both humans and wildlife.

The process of developing the Convention was initiated in May, 1995 by the United Nations Environment Program, or UNEP. In March 1996, an agreement was reached that there was sufficient scientific evidence available to justify taking immediate international action on POPs. This agreement has underpinned and given a sense of urgency to the efforts made by stakeholders from all sectors of society, including governments, intergovernmental organizations, nongovernmental organizations, including both industry and public interest groups, and aboriginal groups.

The activities involved in developing the Convention have resulted in a broad acceptance of the urgent need for action in countries around the world. This is demonstrated by the fact that less than 1 year after the Convention was opened for signature in Stockholm on May 23 last year, 130 countries and the European Community have signed the treaty. So far, nine have become parties through ratification, acceptance or accession procedures.

Another indicator is the number and nature of the actions that stakeholders are taking to address the risk posed by POPs. Based on an annual UNEP survey of representatives of all stakeholder groups, about 110 countries are already active in taking action to address POPs, and actions are also being taken by the public, industry and aboriginal and public interest groups around the world. As one example, the International POPs Elimination Network was established during the negotiation of the treaty, and today it includes over 400 public interest groups from countries around the globe, with programs to address POPs issues at the local, national, regional and international levels. This is indeed encouraging to note.

Let me now turn to the Convention itself. In my view, there are three key provisions to the treaty. The analogy I like to use is the three-legged stool. All three of these legs are needed to make this convention function the way it was designed. The first is controls on the 12 POPs. The second is the evaluation of future candidates for addition to the treaty; and third, financial and technical assistance for developing countries and countries with economies in transition.

The control provisions of the Convention address three areas: intentionally produced POPs, unintentionally produced POPs, and POPs in stockpiles and waste. For intentionally produced POPs, including industries chemicals and pesticides, the goal of the Convention is to eliminate their production and use, and measures are specified for 10 chemicals. To prevent the introduction into commerce of new POPs, parties with regulatory and assessment schemes for industrial chemicals and pesticides will, in conducting assessments of new substances, take measures to regulate, with the aim of preventing the production and use of new POPs. In addition, in assessing the risks posed by any new substances, parties will consider the screening criteria for candidates for addition to the Convention to identify at the earliest opportunity candidates for further consideration.

For unintentionally produced POPs, the Convention goal is the continuing minimization and, where feasible, the ultimate elimination of the total releases of such POPs derived from anthropogenic sources. An approach has been developed that enables each country to define its priorities, develop a national action plan within 2 years of entry into force of the Convention, and then implement that plan.

For stockpiles and waste, the goal is the environmentally sound management of stockpiles that consist of or contain intentionally produced POPs, and of wastes including products and articles upon becoming waste that consist of, contain or are contaminated with intentionally or unintentionally produced POPs. Measures are specified to prevent the reuse or recycling of POPs, and to manage these materials to prevent releases to the environment of POPs during storage, handling, transport or disposal activities.

The second major provisions, then, is a science-based approach to systematically identify and review future candidate chemicals for additional to the Convention. The process and scientific criteria for this provision are specified in the Convention, and a POPs Review Committee will be established at the first meeting of the Con-

ference of the Parties to evaluate information submitted by parties. Considerable attention was paid for the need for openness and transparency in this process to ensure that all candidates will be fully and fairly evaluated.

The third Convention specifies that developing countries and countries with economies in transition will need technical and financial assistance. The Global Environment Facility has been named as the principal entity of the interim financial mechanism to handle funding of capacity building and other related activities. Financial support has already begun to flow and an estimated 50 countries have so far initiated action to prepare national plans. Again, this is very encouraging.

In my view, the Convention represents a significant advance in protecting health and environment from what many regard as the most toxic chemicals that have ever been produced. There is a high level of interest and activity among all stakeholder groups in the POPs area, and I expect that this will continue in the future. In this regard, I am pleased to note that you have both industry and environmental nongovernment organizations appearing before you in this session.

The Convention will enter into force 90 days after 50 parties have ratified it. Many contend that the urgent nature of POPs problems warrants expedited entry into force and concerted collective actions to address these problems and their solutions. Some stakeholders have urged governments around the world to ratify the POPs treaty prior to the Johannesburg Summit in August of this year.

In closing, I would just like to state that I certainly hope that the United States will be among the parties at the first meeting of the Conference of Parties, and I would be very pleased to answer any questions to assist in that process.

Thank you, Mr. Chairman.

Senator JEFFORDS. Thank you.

Mr. Yeager.

STATEMENT OF BROOKS YEAGER, VICE PRESIDENT FOR GLOBAL THREATS, WORLD WILDLIFE FUND

Mr. YEAGER. Thank you, Mr. Chairman.

With your permission, I will submit my full written statement for the record.

Senator JEFFORDS. Without objection, it is accepted.

Mr. YEAGER. I want to say thank you very much for the opportunity to testify, and thanks for holding this hearing so expeditiously so that the Senate might get on the road to implementing and ratifying this treaty.

As requested in your letter, Mr. Chairman, I have come prepared to speak both about WWF's views and about my own experiences and observations in negotiating the treaty. I will try to keep the two hats a little separate so that my views will be clear.

I think it is true that the Stockholm POPs Convention represents the most important effort by the global community to date to rein in and ultimately halt the proliferation of toxic chemicals that threaten the global environment. The treaty targets some of the world's most dangerous chemicals—POPs pesticides such as

chlordane, industrial chemicals such as PCBs, and byproducts such as dioxins. The effects and hazards of those chemicals have been well-described by Stephen Johnson and other witnesses, so I will not go into that except to say that for the United States this is really quite a serious matter. We acted as a Nation to eliminate production and use of most of these chemicals between 30 and 20 years ago. Despite that fact, we are still being affected by them. From Alaska to the Great Lakes to Florida, we face dangers from POPs pollution to our environment and to our way of life.

This is pretty central to understanding the United States' strong national interest in the success of the global effort to reduce and eliminate POPs. The mobility of these chemicals in air and water currents, for example, makes possible their presence, along with metals and other particulates, in incursions of Saharan dust into the continental United States. African dust is the dominant aerosol constituent in Southern Florida's dense summer hazes. A global mechanism to reduce these "chemical travelers without passports" is necessary. It is urgent and it is very much in our national interest.

The POPs Convention, Mr. Chairman, was negotiated by more than 120 governments over a 4-year period. As the head of the U.S. delegation, I was responsible for developing our negotiating objectives and strategies, but more so for ensuring that our national interests and positions and requirements were reflected in the final text. Our position as a Nation was developed through an exhaustive domestic process. It involved regular consultations with seven or eight domestic agencies, industry, environmental and public health communities, Native American representatives, and various interested State governments.

It was a careful process, and I believe that process is part of the reason for the broad support for President Bush's decision to sign the Stockholm Convention in April. I would also says, Mr. Chairman, we had a very expert negotiating team, some of whom are in the room today. But more than that, both industry and environmental representatives made important contributions to the final product. I would like to note in particular the constructive roles played by Michael Walls, who is sitting next to me, and Mr. Paul Hagen, both of the American Chemistry Council.

WWF is working with governments around the world in the hope of generating 50 ratifications to this treaty by the time of the World Summit on Sustainable Development in Johannesburg in late August. We know that achieving Senate advice and consent within the next 15 weeks is a much-accelerated timeframe, but with energy and determination, we believe it is achievable. We also believe it would be only just for the United States to be a leader in the early running of this Convention as it goes into operation.

So I would like to thank you for bringing this bill forward. I would also like to thank Senator Smith for bringing forward the Administration's bill. I have not included a lot of comments about the Administration's bill in our testimony. We have not had a full chance to review it, but we will be glad to do that for the record of the committee.

Senator JEFFORDS. Please do.

Mr. YEAGER. The treaty's provisions have been well-described by other witnesses, Mr. Chairman. I would like to talk a little bit about the balance of interests and compromises that went into the treaty's formation. The U.S. interest, as we articulated it during the negotiations, was to achieve an ambitious treaty that would address the global environmental damage caused by POPs, but to do so in a way that would be practical, implementable, financially efficient and consistent with the fundamental structure of our own national approach to regulation.

Other countries had different interests—some similar, some not. The developing countries had neither the will nor the inclination to agree to make POPs cleanup a priority against their other environmental priorities unless the developed world was willing to assist them financially and technically. So the establishment of the Global Environment Facility as the interim financial instrument of the Convention was actually very critical to the result.

Similarly, all parties clearly recognized that the Convention could not be successful if it were limited solely to the 12 chemicals already on the POPs list. But the question of what scientific and institutional process to use in adding chemicals to the list was fraught with difficulty. For the United States, it was critical that the process be scientifically driven and not subject to political whim, and that it contain important safeguards for U.S. interests. For some in the EU and elsewhere, it was critical that the process for adding chemicals not be subject to endless procedural roadblocks.

The procedure for adding new chemicals that evolved in the negotiations is a genuine compromise, but one which in my view successfully protects U.S. interests in every respect. First, we insisted on and successfully negotiated the scientific criteria according to which a nominated chemical would be evaluated. Then we negotiated the process through which these criteria would be applied by the scientific screening committee, which we called the POPRC.

Finally, we negotiated the terms under which the COP—the Conference of the Parties—would review the recommendations of the scientific group, the conditions under which the Conference of the Parties could make a decision to add or reject a chemical, and the procedures for party governments to accept or reject the decision of the conference of the parties. The addition process as agreed offers the United States the safeguards of rigorous science, a careful review procedure, a high institutional threshold for COP decisions to add chemicals, and finally, the right to reject the addition of a new chemical if appropriate.

Just to sum up, Mr. Chairman, I think the safeguards built into the treaty are actually very powerful. They afford the United States the full and careful right to review, to participate in the science for adding new chemicals, to participate in the COP's decision to agree to the science or not, and finally to reject the addition of a chemical for cause if the United States feels that that is important. So I think in that respect, the failure of the Administration to include provisions for the addition of new chemicals cannot be justified by the need to add any additional safeguards to the process.

I would say, Mr. Chairman, that we hope the Senate will move on two fronts expeditiously in implementing the treaty. First, that you will in fact work together to move forward with your and Senator Smith's implementing legislation, but of course including the provisions necessary to allow the United States to fully participate in the addition of new chemicals. Second, that you will help the Appropriations Committee realize the importance of the United States' GEF contribution to the proper working of this treaty. It is very important that the Global Environment Facility be funded at a level that allows them to take on this new priority without cannibalizing their existing priorities. As you may know, Mr. Chairman, the replenishment negotiations for the Global Environment Facility are going on today, as we speak, downtown. We are very hopeful that the United States will come forward with a constructive proposal in that negotiation.

With that, Mr. Chairman, thank you very much for allowing me the time, and I will be glad to answer any questions.

Senator JEFFORDS. Thank you for your excellent testimony.

Mr. Walls, please proceed.

STATEMENT OF MICHAEL WALLS, SENIOR COUNSEL, AMERICAN CHEMISTRY COUNCIL

Mr. WALLS. Good morning, Mr. Chairman. Thank you for the opportunity to be here.

We have submitted a written statement to the committee and would appreciate it being included in the record.

Senator JEFFORDS. Without objection, it is included.

Mr. WALLS. Mr. Chairman, I am here today to reinforce the chemical industry's strong support for the Stockholm Convention on POPs. It is our hope that that treaty and its reasonable implementation will be the subject of quick action by the Senate.

While the Stockholm Convention has the potential to bring additional regulation to an already highly regulated industry, our support for the Convention lies in three very simple points. No. 1, the Convention is consistent with our industry's commitment to product stewardship. Our industry's goal is to prevent health and environmental damage in the manufacture and use of chemical products. That commitment to product stewardship is an integral part of our Responsible Care program, which is being implemented by the chemical industry in 46 countries.

No. 2, the Convention is the culmination of many different initiatives by industry, nongovernmental organizations and governments to address the concerns about persistent organic pollutants. It is the next best step to assure that governments around the world take appropriate measures just as we have here in the United States to control the manufacture, use and disposal of POPs and to reduce unwanted POPs emissions.

No. 3, our support for the Convention is premised on its incorporating a risk-based science-justified approach to considering possible additions to the list of chemicals. It is an approach that is entirely consistent with longstanding U.S. law and practice. It is one that will lead to appropriate controls on POPs chemicals that pose global threats.

We believe the Convention is an excellent example of what can happen when governments and stakeholders have a constructive dialog. Throughout the negotiations, many nongovernmental organizations made many important positive contributions, particularly the World Wildlife Fund. When he was chief U.S. negotiator, Brooks Yeager helped set a tone for openness and transparency in the process. I think that tone and the stakeholder involvement measurably improved this treaty.

It is critical that the United States continue its longstanding leadership role in the global effort to control POPs. To have that role, the United States must be one of the first 50 parties ratifying the Convention.

I would like to spend just a few minutes on some of the implementation issues I know are of particular concern to you, Mr. Chairman. The Stockholm Convention contemplates additions. The treaty establishes a reasonable process for decisions to list new chemicals, and we believe that implementing legislation must address that process. We think there are a number of options available that will address the Senate's constitutional role regarding treaty amendments, as well as this committee's interests in practical statutory changes.

This hearing really represents the first opportunity anybody has had to discuss the two options that are currently on the table for implementing the treaty—your own bill and the Administration's proposal. The core implementing legislation in both proposals are similar, but both raise some important concerns. Both approaches raise some questions about the status of chemicals on the UNECE LRTAP POPs Protocol list that are not addressed under the Stockholm Convention. Both approaches impose significant restrictions on the use of information in any subsequent regulatory proceeding. In our view, that limitation may not be justified.

We are also concerned about the additional provisions in S. 2118 that are not strictly related to the obligations and responsibilities established under the Stockholm Convention. Those provisions raise some concerns about U.S. acceptance of the internationally accepted criteria for identifying POPs and the possible duplication of existing EPA programs. But the essential point is that the Convention does not address those issues. We think that U.S. implementation should be guided by two very simple principles. First, full implementation of the Convention obligations into law, particularly TSCA and FIFRA; and second, narrowly drawn amendments that implement only those obligations.

It is also important that Congress address the necessary amendments to implement the Rotterdam Convention on PIC. That Convention warrants strong U.S. support, and because it also requires TSCA and FIFRA amendments, it makes sense to address that treaty at the same time as the Stockholm Convention.

So to sum up, Mr. Chairman, we believe that the Convention is a significant step in securing international action on POPs. We believe that appropriate amendments to TSCA and FIFRA that reflect the treaty's obligations can be crafted, particularly to address the additions issue. We look forward to working with you and the Administration as those amendments are crafted. The Senate has

an important opportunity. We hope you will seize that opportunity and act on the treaty soon.

I would be happy to answer any questions. Thank you, Mr. Chairman.

Senator JEFFORDS. Thank you for your excellent testimony.

Ms. Perry.

STATEMENT OF KAREN PERRY, DEPUTY DIRECTOR, ENVIRONMENT AND HEALTH PROGRAMS, PHYSICIANS FOR SOCIAL RESPONSIBILITY

Ms. PERRY. Thank you, Mr. Chairman. I would ask that my written statement also be included in the record today.

Senator JEFFORDS. It will be, without objection.

Ms. PERRY. I am speaking on behalf of Physicians for Social Responsibility today—a national membership organization representing more than 22,000 physicians, health care professionals, and citizens concerned about public health. We welcome the opportunity to present our views on the Stockholm Convention today, including our belief that it is highly important that the United States be a leader in implementing a living, breathing POPs treaty.

PSR's concern about POPs stems from the medical tenet of "first, do no harm." That is because in 1994, an early draft of the U.S. EPA's dioxin reassessment indicated that hospital waste incinerators were a leading source of this potent POP dioxin. It was just a few years later that nations began crafting this global treaty on dioxin, PCBs, DDT and other POPs. Throughout these negotiations, PSR served as the secretariat for a global network of more than 400 NGO's from 75 countries committed to POPs elimination. Today, the ratification and full implementation of the Stockholm Convention remains one of PSR's top priorities.

POPs are particularly troubling to the public health community. They contaminate the fatty tissues of humans and animals, making meat, fish, eggs, and even breast milk toxic. Exposure to extremely low levels of some POPs can disrupt the function of the endocrine system. POPs have also been implicated in cognitive deficits, a variety of cancers, precocious puberty, endometriosis, declining sperm counts, and malformations of the penis and testicles, among other effects. Children and developing fetuses are most at risk. Studies have shown that prenatal exposure to low levels of some POPs can result in decreases in IQ and short-term memory, delayed psychomotor development, abnormal reflexes and speech problems. It is clear that as a class of chemicals, POPs pose a hazard.

While the Stockholm Convention focuses initially on 12 POPs, the international community always envisioned a dynamic instrument that could take into account emerging scientific knowledge about similar chemicals. During the negotiations, an experts group hammered out a set of science-based screening criteria that you have heard today already from previous witnesses. In short, the evaluation and addition of POPs was not an afterthought, and the Convention clearly spells out a process for doing this. Parties will submit chemical nominations to the POPs Review Committee, or POPRC, which will screen them, prepare a risk profile, obtain input from all parties, and make recommendations. Then the Conference of the Parties must approve the addition of a POP by

amendment, and as you have heard, the United States has reserved the right to opt in to each amendment individually.

It is worth noting that the universe of POPs that we are talking about that might be added to the Stockholm Convention over the long term is not vast. Application of the science-based criteria in the treaty is likely to result in at most the addition of one or two dozen POPs, not hundreds or thousands.

A briefing for NGO's last July indicated that an interagency group had agreed on changes to the Toxic Substances Control Act and the Federal Insecticide, Fungicide, and Rodenticide Act, including those needed for EPA to address additional POPs. Regrettably, the Administration's proposal leaves out this critical piece of implementing authority. This omission would put up an unnecessary hurdle to domestic regulation of future POPs, and would amount to a failure to fully implement the convention. It would result in an absurd situation in which each new POP, which has already been agreed by the United States as a member of the Conference of the Parties, and subjected possibly to Senate review under the opt-in process, would still require both Houses of Congress to amend TSCA and FIFRA again. Given that these laws have rarely, if ever, been amended, such a process seems unmanageable, undesirable and politically unrealistic.

Your bill acknowledges this defect and legislates a domestic evaluation process to parallel the international one from start to finish. S. 2118 would give a rebuttable presumption to the decision of the Conference of the Parties to add a new POP. Based on the POPRC's work and its own, EPA could conclude that an added POP presents an unreasonable risk of injury to health or the environment, and the Agency would be authorized to undertake a rulemaking at that time.

Administration officials, as you have heard, have argued that such authority is not needed to fulfill our obligations, but PSR disagrees. As written, TSCA and FIFRA would not allow EPA to prohibit the manufacture for export of a future POP. Experience with the dirty dozen confirms this. Chlordane and heptachlor, for example, were manufactured and exported for years after all uses were canceled domestically.

As other witnesses have noted, the United States has long been at the forefront of global efforts to protect the environment and public health. For example, this country led the world in phasing out the use of DDT and leaded gasoline. S. 2118 would again facilitate U.S. leadership. In addition to the provisions we have mentioned already, it would require EPA to contract with the National Academy of Sciences to conduct a major POPs study, begin identifying priority POPs for possible nomination, develop monitoring and control strategies for persistent and bioaccumulative substances, and finalize its long-awaited state-of-the-science dioxin reassessment. These provisions will position the United States to be a proactive participant to the Stockholm Convention.

The announcement by President Bush of his intention to sign and ratify the Stockholm Convention more than a year ago received unprecedented support from the public interest community, the chemical industry, and Members of Congress on both sides of the aisle. This important treaty continues to offer a rare opportunity to

achieve consensus in the environmental policy arena. Its rapid ratification and full implementation can be claimed as a victory by all. It is up to this committee and this Congress to strive for such an outcome, and we look forward to working with you to achieve it.

Thank you.

Senator JEFFORDS. Thank you. Thank you all.

I am going over and register my presence, which was not easy. My planes last night were canceled three times, and I finally ended up taking a train so I would have the opportunity to be with you. So I do not know who is doing all these things to us in this hearing——

[Laughter.]

Senator JEFFORDS. I have my suspicions. But anyway——

Mr. YEAGER. It is climate change, Mr. Chairman.

Senator JEFFORDS. I will be right back.

[Recess.]

Senator JEFFORDS. The meeting will come to order.

I will now have a few questions for you all.

The first question, Mr. Muir, you were working at the Council on Environmental Quality at the time of TSCA, which was enacted in 1976, and are recognized as the expert on that piece of legislation. Based upon your experience, could you properly implement the POPs Convention without amending TSCA to add a procedure for addressing future POPs?

Mr. MUIR. Well, I am familiar with the Toxic Substances Control Act. I also was the first head of the office implementing the law, so I know the law fairly well. Obviously, I am not speaking in my role from the National Academy of Sciences.

Senator JEFFORDS. I understand.

Mr. MUIR. In order to regulate under the Toxic Substances Control Act, one has to make a finding of unreasonable risk under Section 6 of the law. That involves a balancing of risks and economic considerations. So to use the law as it is currently drafted for new chemicals would require the Administrator of the Environmental Protection Agency, through rulemaking, to make such a finding. Such a finding may be applicable. On the other hand, it would apply to the production, distribution and use of the chemical within the United States. It would not apply to export and so forth. So it clearly was not designed for this type of an international treaty application.

Senator JEFFORDS. Again, based on your experience with TSCA, is it politically realistic that TSCA can be amended each time a new chemical is added to the POPs Convention?

Mr. MUIR. I defer to the chair on that.

[Laughter.]

Senator JEFFORDS. Well, I will ask myself and let you know what my answer is.

[Laughter.]

Senator JEFFORDS. Mr. Buccini, how critical is the issue of being able to add additional chemicals beyond the initial 12 to the POPs Convention?

Mr. BUCCINI. Mr. Chairman, as I mentioned earlier with my three-legged stool analogy, it really is key not only because of what it achieves, it is because it is part of the overall architecture of the

Convention. I think Mr. Yeager had indicated that there were all kinds of compromises and sort of cross-connecting issues that were resolved. Ultimately, the Convention represents a package deal. You know, we can say it is the addition of new chemicals, but in fact it is the embodiment in some cases of the need to show that the Convention will have life after the 12 have been dealt with; the need to address future POPs as they come along.

It incorporated a number of the elements of caution of precaution, whichever word does not strike fear into people's hearts, because I realize that that is an issue. But it is really very much a part of the overall architecture. I think especially going back to my first remarks that it is not a sustainable practice in the long term to continue to generate and release to the environment chemicals which prove to have POPs properties. So as they are discovered in the future, I think it would be essential for them to be brought on board and to be treated in an appropriate manner after a full and fair evaluation of them by the POP Review Committee, by the Conference of Parties.

So I guess what I have worked my way toward is I think it is a key ingredient of the Stockholm Convention.

Senator JEFFORDS. Can you outline for the committee all of the mechanisms contained in the POPs Convention that could serve as a safety net if the United States did not agree with a decision to add a particular chemical to one of the annexes?

Mr. BUCCINI. Let me do them in sort of reverse order. The easiest one is that when the United States deposits its instrument of ratification, it can make a statement that under Article 25, paragraph 4, that it declares that any amendment to Annex A, B, or C—that is, any addition of the name of a chemical to the Convention—that such an amendment would only enter into force upon the deposit by the United States of an instrument of ratification, acceptance or approval.

So that is the simplest one, and I think it was already mentioned a few times this morning. It is in fact the simplest one. Of the nine countries that have so far become parties to this Convention, one party has already chosen that option, and that is Canada. On May 22 of last year, they made it quite clear that Canada was taking that option. To me, that is probably the most streamlined way of dealing with the issue because what you are saying is that we are now going to go back to the other two mechanisms.

The first one is the nature of the review process itself. It is a process which will take years for each chemical once the Conference of Parties begins to meet. It is a process that is built on science and agreed upon criteria. I believe that among your participants in the panel, both the first panel and this one, there was no issue at all with the scientific criteria as to what constitutes a POP, and taking a look at how the Review Committee will interact in an open and transparent manner involving observers as well as parties.

There is a very robust, full, open, transparent process by which a chemical will be evaluated as to whether it possesses scientific properties, then a risk profile will be generated, again through an open, transparent process; and finally a risk management profile that will be considered by the Conference of Parties.

This is a rather lengthy, open, transparent consultative process which I would expect will give a full and fair hearing to each chemical. I would argue that the process of evaluating candidates is itself a very good safeguard against sort of one country or a spurious issue from making it all the way through to the end.

There is also, and my memory is failing me now, it is somewhere in Article 23 or 24, the so-called opt-in provision, where a country can decide that if there is not consensus on an amendment by adding a chemical, and if it goes to a vote and three-quarters vote carries the motion, if a country was not in support of that vote, it can deal with the so-called opt-out provision.

I would argue that the process of evaluating the candidate itself has various safeguards and checks and balances in it. There is the one under, I think it is Article 23, and then the Article 25.4, and I would argue certainly that the last one, at least for Canada, has sort of provided the amount of comfort that Canada needs to be able to become a party to the Convention.

Mr. YEAGER. Mr. Chairman, may I add something to that?

Senator JEFFORDS. Yes, please.

Mr. YEAGER. From the U.S. perspective, there is another safeguard that is not as formal. In fact, the U.S. technical team, particularly from EPA, were very instrumental in molding this treaty and informing the negotiations. I would say from my personal recollection there were only two or three other countries that had the technical teams that could match our folks. We had on our staff the people who designed the control annexes for the Convention; the people who brought forward the information about specific chemicals that allowed a lot of the treaty work to go forward. Among the other countries, perhaps Germany had a technical team of equal caliber. Canada certainly had a very good technical team. But very few countries could match our technical expertise.

If we ratify and become a party, we are going to be on the POPs Review Committee. We will have people who will be U.S. experts, who will be—because they will be needed. So the first and most important safeguard is our participation in the science process of the POPs Review Committee itself. After that, we have all the legal safeguards that Chairman Buccini has mentioned. So it is a fairly powerful array.

Senator JEFFORDS. Mr. Yeager, at the conclusion of negotiations on the POPs Convention, what was the view among agencies on the need to have a mechanism in our domestic implementing legislation to address addition of future chemicals? In other words, was there interagency support for including an adding mechanism?

Mr. YEAGER. I think there was a broad assumption inside the delegation that was shared by all, that we would in fact institute domestic procedures to parallel the nomination and decision process for new chemicals. It was not a matter of support or opposition. We just assumed that that would be of course what we would do. We were fairly careful in our conversation with the congressional staff observers who were with us because until we had the full treaty text before us and had analyzed it and had the State Department lawyers work it over, we are not in the habit of making commitments as to what legislation will be required. In informal conversations with members of the congressional observing group,

including Allison Taylor, who is now on your staff, who was then with the House Energy and Commerce Committee, we did say that we assumed that the major amendments would have to be TSCA and FIFRA and they would be for the purposes of allowing the prohibitions on the export of chemicals and for the addition of new chemicals.

Senator JEFFORDS. Mr. Walls, in your letter of February 26, 2002 to the Environmental Protection Agency, you indicated that you understood that the Administration had drafted a legislative proposal to amend TSCA and FIFRA to implement the treaty obligations as to the 12 named chemicals, but that the Administration would not propose amendments to address additional chemicals listed under the POPs Convention process. Your understanding has now been shown to be correct. What is the American Chemistry Council's current position on the omission of an adding mechanism?

Mr. WALLS. Mr. Chairman, in February we made that observation in Fred Webber's letter to Administrator Whitman on the basis of media reports in the environmental trade press regarding the Administration's draft of legislation. As we stated in our testimony, we believe that an additions process must be part of the implementing process. It makes sense to address it now, and we are confident that an appropriate approach can be crafted as the legislation goes forward.

Senator JEFFORDS. In your letter of February 26, 2002, ACC noted, "the treaty contemplates the listing of other POPs in the future and provides a criteria and risk-based process to consider nominations made by the governments." That is a plural. And you believed it possible to, "craft appropriate amendments to TSCA and FIFRA to reflect the treaty addition process." Is that still your view?

Mr. WALLS. Yes, sir.

Senator JEFFORDS. Does this indicate that you are prepared to work with this committee on specific language to amend TSCA and FIFRA to authorize the Administrator of EPA to ban a chemical beyond those listed in the treaty which has completed the treaty's, "rigorous process of review," and is recommended as an additional POPs chemical?

Mr. WALLS. We think there are a number of options available to consider for those amendments, Mr. Chairman, and we are prepared to work with the committee.

Senator JEFFORDS. Thank you.

Ms. Perry, you mention in your testimony that children and developing fetuses are particularly vulnerable to POPs. Are there other populations that suffer from increased exposures of POPs?

Ms. PERRY. There are, and among them are Arctic indigenous peoples. Studies in far-northern Quebec in Canada have shown that Inuit mothers, for example, have among the highest levels of POPs like DDT and dioxin in their breast milk of any women in the world, even though they are far from the sources. These kinds of studies have not yet been done in Alaska to the same extent. They are under way, and we expect that they will similarly show that Alaska Native peoples, particularly those whose diets include fish and marine mammals, will also be abnormally exposed. Fisher

people, people who recreationally and subsistence fish in the Great Lakes for example, are also highly exposed, and studies have shown that.

Senator JEFFORDS. What are your views on the provisions of S. 2118 for the National Academy of Sciences to undertake studies on POPs, as well as a requirement for a release of the dioxin reassessment?

Ms. PERRY. We think those provisions are actually very closely tied to the United States's obligations under the Stockholm Convention. For example, the National Academy of Sciences study, I think several witnesses have pointed out that it will be a couple of years before the POPRC gets itself together and begins considering nominated chemicals. We would like to see the United States use that time wisely and the NAS study and the other provisions about EPA taking a look around and seeing what chemicals in this country we might be prepared to nominated, or that the United States might be prepared to support if another country nominated them to the POPRC—we think that is a good use of that time.

With regard to the dioxin reassessment, as has been noted, the ultimate elimination of dioxin is one of the Treaty's provisions and in the short term, all parties would be asked to submit national action plans on dioxin. We think that the EPA's dioxin reassessment, which has now been in the works for 10 years, would be the basis for creating a national action plan. It contains this country's inventory of dioxin sources and releases. It has been thoroughly peer-reviewed. It passed the EPA Science Advisory Board last year. So we would like to see it released as soon as possible to help inform our national action plan on dioxin.

Senator JEFFORDS. Thank you.

Does anyone have an additional comment they wish to make? Yes, Mr. Buccini?

Mr. BUCCINI. Yes, Mr. Chairman. In the earlier testimony this morning, the issue of what takes place with regard to new chemicals between now and the entry into force of the Convention, I just wanted to clarify what the current understanding is. First, in the Stockholm Convention in May of last year, there was a resolution that guides the interim activities of the Intergovernmental Negotiating Committee, which will continue to meet on an annual basis until it is replaced by the Conference of Parties. The next meeting is in about 4 weeks time in Geneva.

There were two important things with regard to the evaluation of new chemicals. There was considerable discussion and actually a bit of a debate as to whether progress in the interim period should begin in terms of the INC actually evaluating candidates. The final outcome of that debate was really two-fold. First is an agreement that in fact no country will submit a nomination prior to the first meeting of the Conference of Parties. Second, the resolution makes it quite clear that countries are encouraged on a national basis to be preparing for the first meeting of the Conference of Parties. So it isn't that there is no activity going on, but the activities are really at the national level. Countries such as the United States, Canada and others are examining what candidates they may wish to put forward in the future.

So I just wanted to be clear on that. I think there were some remarks that were made earlier which might not have conveyed that exact message, so I just wanted for the record to be clear on that. Countries are encouraged to undergo national preparations, but they are discouraged from attempting to submit them to the INC process. COP one will be where the first nominations are submitted.

Thank you, Mr. Chairman.

Senator JEFFORDS. Anyone have a comment? Yes, Mr. Muir?

Mr. MUIR. As further follow-on to your question to me earlier, one additional factor with respect to TSCA Section 6 is that those unreasonable risk findings in general are made on a use-by-use basis. It is very difficult to act on the entire production, distribution and use of a single chemical. So it is a difficult process. The Agency tried to act, for example, with respect to regulating asbestos—not a POP, but it was not able to do so because it is a very difficult finding which is done on a use-specific basis.

Senator JEFFORDS. Anyone else? Any further comment?

Mr. YEAGER. To say thank you, Mr. Chairman, for taking this issue up and moving it along.

Senator JEFFORDS. I will accept that comment. Thank you.

Thank you all. This has been extremely helpful. I appreciate the work that went into your presentations and your answers, and I look forward to continuing to work with you. We will leave our options open to give you phone calls and other things to help us and assist us to make sure that we do the right thing.

With that, the hearing is adjourned.

[Whereupon, at 11:20 a.m., the committee was adjourned, to reconvene at the call of the chair.]

[Additional statements submitted for the record follow:]

STATEMENT OF HON. BOB SMITH, U.S. SENATOR FROM THE STATE OF NEW HAMPSHIRE

I want to thank the witnesses for sharing your expert testimony with the committee. Last spring, with Governor Whitman and Secretary Powell at his side, President Bush announced his support for the Stockholm Convention on Persistent Organic Pollutants—The POPs Convention. This agreement will restrict and eliminate the production, use and/or release of 12 chemicals, including DDT, PCBs and dioxins, that are some of the most persistent and dangerous chemicals ever manufactured. Because they are so mobile and accumulate in the food chain, absent international action, they will continue to be a risk to us all.

I am pleased that the international community came together and found a common solution. The agreements that are the subject of this hearing were developed in cooperation internationally and enjoy strong bipartisan support here in the United States. When we all work together, we can do great things for our environment. I want to commend President Bush and Governor Whitman for their leadership in pressing for this convention and delivering their implementing legislation to Congress. I am honored to be the lead Senate sponsor of the President's implementing legislation, S. 2507.

I know that Senator Jeffords has also introduced his own version of implementing legislation. The purpose of today's hearing is to discuss those two proposals. The two bills mirror each other with a few differences: The Administration proposal includes a provision to implement the PICs agreement—the Jeffords bill does not; the Jeffords bill sets out an explicit mechanism for adding future chemicals when and if adopted by the international community -the Administration bill does not; and, the Jeffords bill provides a role for the National Academy of Science and also mandates a dioxin risk assessment.

I realize that there is some controversy surrounding what mechanism the United States should use for the addition of any new chemicals. I was pleased when Governor Whitman stated at our press conference announcing implementing legislation

that it is EPA's intention to work closely with the Congress to address the adding mechanism. I take that as a good faith and constructive gesture to deal with this issue in a bipartisan manner. It is my hope that we can avoid partisan rhetoric and find a good consensus answer to what appears to be the only issue of substance left to be resolved. It is also my hope that people will not use this single point that needs to be worked out as an excuse to politicize this process and turn what is a strong bipartisan effort into a political battle. The result of making this issue partisan would be to delay the implementation of something that EVERYONE wants. As I have said over and over again, environmental politics delays environmental protection. Let's keep the tone down, work together and see if we can solve this lone issue and claim victory on an environmental treaty that everyone believes is the right thing.

STATEMENT OF DEPUTY ASSISTANT SECRETARY JEFFRY M. BURNAM, DEPARTMENT OF STATE

I would like to thank the committee for inviting me here today to speak about three treaties which the Administration supports. The three treaties are: the Stockholm Convention on Persistent Organic Pollutants, or the POPs Convention; the POPs Protocol to the Convention on Long-Range Transboundary Air Pollution, or LRTAP POPs Protocol; and the Rotterdam Convention on Prior Informed Consent. The POPs Convention aims to protect human health and the environment from 12 chemicals that are of particular concern in the environment because they have four intrinsic characteristics: they are toxic, they have the potential to bioaccumulate, they are stable and thus resistant to natural breakdown, and they can be transported over long distances. The 12 chemicals include: Aldrin, Hexachlorobenzene, Chlordane, Mirex, DDT, Toxaphene, Dieldrin, Polychlorinated biphenyls (PCBs), Endrin, Polychlorinated dibenzo-p-dioxins (dioxins), heptachlor, and Polychlorinated dibenzo-p-furans (furans). The POPs Convention was submitted to the Senate for advice and consent this week, and we look forward to working with the Senate to help ensure early ratification.

POPs are capable of impacting human health and the environment far away from where they are released, including across national borders. POPs can have impacts in areas all over the United States, but have been of particular concern in Alaska and the Great Lakes Region. These chemicals have been linked to adverse human health effects: these include cancer, damage to the nervous system, reproductive disorders, and disruption of the immune system. These 12 chemicals are banned, severely restricted, or controlled in the United States, but are still in use abroad in many places. Because they are capable of long-range transport, a global treaty to address their human health and environmental effects is needed and was sought by the United States.

The POPs Convention addresses two types of pollutants: intentionally produced POPs, such as DDT or PCBs; and unintentionally produced POPs, such as dioxins and furans. For intentionally produced POPs, the Convention prohibits their production and use, subject to certain exemptions such as DDT use for disease vector control. The Convention also restricts trade in such substances. For unintentionally produced POPs, the Convention requires countries to develop national action plans to address these releases, and to apply "Best Available Techniques" on specified key source sectors to control them.

Under the POPS Convention, parties must take appropriate measures to ensure that POPs wastes are managed in an environmentally sound manner. Recognizing the needs of developing countries in managing POPs, the Convention includes a flexible system of financial and technical assistance by which developed countries will help developing countries to meet their obligations under POPS. Finally, the POPs Convention creates a science-based procedure that will govern the inclusion of additional chemicals to the Convention, including defining the criteria that must be met by chemicals proposed to be listed: namely that they are toxic, that they bioaccumulate, that they are resistant to natural breakdown and that they can be transported over long distances. In the language of the Convention, this science-based procedure involves an evaluation of "whether the chemical is likely, as a result of its long-range environmental transport, to lead to significant adverse human health or environmental effects, such that global action is warranted." We do not yet know the manner in which the risk management factors will be weighed when applied to additional chemicals.

The implementing legislation submitted by the Administration also permits the United States to implement and become a party to two additional agreements. The first agreement—closely related to the Stockholm Convention—is the POPs Protocol

to the LRTAP Convention. LRTAP POPS is a regional agreement negotiated under the auspices of the United Nations Economic Commission for Europe, which includes the United States, Canada, Europe, and the former Soviet Republics. The obligations in the LRTAP POPs Protocol are generally similar in nature and scope to those in the Stockholm POPs Convention, but are different in some ways. For example, LRTAP POPS includes four chemicals not included in the Stockholm Convention.

The other agreement is the Rotterdam Convention on Prior Informed Consent, which aims to promote shared responsibility between exporting and importing countries in protecting human health and the environment. The Rotterdam Convention stipulates that export of certain especially hazardous chemicals can only take place with the prior informed consent of the importing country. When exported, these chemicals must be labeled and accompanied by safety data sheets that explain their potential health and environment effects—these requirements are similar to those currently in place in the United States. The Rotterdam Convention significantly enhances the safe management of chemicals by enabling countries, especially developing countries, to identify risks and make informed decisions about the importation and use of highly dangerous chemicals.

Together, these three Treaties address a number of chemical management problems faced by the international community. They enjoy broad support from the public, from environmental and industry organizations and from many Members of Congress with whom we have been in contact. All of these agreements benefit the health and environmental well-being of U.S. citizens and of people all over the world.

RESPONSES OF DEPUTY ASSISTANT SECRETARY JEFFRY M. BURNAM TO ADDITIONAL QUESTIONS FROM SENATOR JEFFORDS

Question 1. Does the Department of State favor the "opt-in" approach under Article 25 of the Convention in which the U.S. would need to affirmatively ratify any new chemical added to the POPs treaty before the U.S. would be bound to control that chemical as a POP?

Response. Yes.

Question 2. Does the Department of State contemplate a role for Congress, in particular, the Senate, in the decision of whether the U.S. should agree to regulate a new chemical added to the Stockholm Convention?

Response. Yes. We envision that a decision whether the United States should become bound by an amendment to add a new chemical to the Convention would be made in consultation with the Senate, given the Senate's role in the treatymaking process. We look forward to a detailed discussion of that consultation process with the Senate, in particular the Senate Foreign Relations Committee, to consider whether the Senate's advice and consent would be required for all future amendments to the Convention's control annexes. In the event that additional legislative authority were required in order to permit the United States to implement a particular amendment, then the House of Representatives would of course play a role in that legislative process.

Question 3. What role will the Senate have in the addition of new POPs to the Stockholm Convention?

Response. As noted in the answer to question 2 above, we envision that a decision whether the United States would become bound by an amendment to add a new chemical to the Convention would be made in consultation with the Senate, given the Senate's role in the treaty-making process. We look forward to a detailed discussion of that consultation process with the Senate, in particular the Senate Foreign Relations Committee, to consider whether the Senate's advice and consent would be required for all future amendments to the Convention's control annexes.

Question 4. What role will the Senate have in the addition of new POPs under the LRTAP POPs Protocol?

Response. The LRTAP Convention, and other LRTAP Protocols to which the United States is presently a party, were not subjected to the advice and consent of the Senate, but were concluded as executive agreements that were implemented in accordance with existing statutory and regulatory authorities. Assuming the proposed implementing legislation for the LRTAP POPs Protocol is enacted, the Administration assumes that there would be a good basis for concluding that Protocol (and any amendments thereto) in the same manner. We are, however, interested in consulting with the Senate on this matter. In any event, the Department anticipates that the executive branch would consult closely with the Senate (as well as affected

U.S. stakeholders) in considering whether to become bound by any future amendments to the Protocol.

Question 5. Does the Senate [sic] favor a new role for the National Academy of Sciences in the identification of new POPs, as set forth in S. 2118?

Response. The State Department does not believe that a role for the National Academy of Sciences is necessary in this legislation.

Question 6. Did the State Department have adequate technical and policy support from EPA in the course of the negotiations for the Stockholm Convention?

Response. Yes. The State Department worked very closely with EPA during these negotiations, and we received very effective technical and policy support.

STATEMENT OF ASSISTANT ADMINISTRATOR STEPHEN L. JOHNSON, OFFICE OF PREVENTION, PESTICIDES, AND TOXIC SUBSTANCES, U.S. ENVIRONMENTAL PROTECTION AGENCY

I. INTRODUCTION

Mr. Chairman and members of the committee, thank you for the invitation to appear before you today. It is my privilege to represent the U.S. Environmental Protection Agency and to discuss the Administration's legislative proposal to effectively implement three very important international environmental agreements: The Stockholm Convention on Persistent Organic Pollutants (POPs), the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (PIC) and the Protocol on Persistent Organic Pollutants negotiated under the U.N. Economic Commission for Europe's Convention on Long Range Transboundary Air Pollution (LRTAP POPs Protocol). This afternoon, I respectfully ask for your help to expeditiously approve the Administration's legislative proposal so that the United States may be able to quickly and effectively ratify and implement these important environmental agreements.

The Bush administration is committed to working closely with all members of this committee and the U.S. Senate to ensure quick enactment of the implementing legislation and subsequent ratification of the agreements. We want to work with you to craft legislation that tracks the provisions of these agreements and ensures that the United States retains its current position as the international leader in chemical environmental

safety.

I am pleased to have the opportunity to update the committee on EPA's domestic and international activities to effectively manage these pesticides and chemicals, our intentions with respect to the listing of additional chemicals on the POPs agreements and to explain specific provisions of the Administration's draft legislative proposal.

The Bush administration is firmly committed to ratification of both the global POPs Convention, the PIC Convention and the regional LRTAP POPs Protocol.

Here in the United States, we have already taken extensive steps to address risks posed by the substances covered by the global POPs Convention and the LRTAP POPs Protocol. Stand-alone action by any one country is not enough. These chemicals continue to pose real health risks to U.S. citizens and to people around the world because they are used and released in other countries and travel long distances from their source. In the United States, these agreements are of particular importance for the people and environment of Alaska, which are impacted by POPs transported by air and water from outside the State. This is particularly true for Alaskan Natives, who rely heavily on traditional diets comprised of fish and wildlife. By joining with the rest of the world to phaseout or reduce these toxic pollutants, we protect the health and the environment, not only of our fellow Americans, but of all those who share our planet.

II. U.S. ROLE AS AN INTERNATIONAL LEADER

At EPA, we take the threats posed by these pesticides and chemicals to our environment and public health very seriously. The U.S. was the first country to begin a thorough scientific reassessment/re-registration program for pesticides and, I believe, is still the only Nation that is looking at the cumulative risks posed by pesticides. Other countries look to the United States to provide strong leadership in the area of chemical safety. EPA is internationally recognized for its sound scientific risk assessments and regulatory decisionmaking. Our actions are respected and often replicated in other countries across the globe.

EPA continues to take measures that promote the objectives of the POPs Convention. As you know, the Convention contains obligations related to providing technical and financial assistance to developing countries and countries with economies in transition to help them comply with POPs Convention obligations. The U.S. is committed to providing financial and technical assistance to assist developing countries in ratifying the Convention and meeting their obligations.

III. THE BUSH ADMINISTRATION'S LEGISLATIVE PROPOSAL TO IMPLEMENT POPS, PIC AND LRTAP

The Administration's legislative proposal is a culmination of an interagency process that provides targeted changes to the Toxic Substances Control Act (TSCA) and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) in order to track the provisions of these three agreements. Because these agreements are largely consistent with existing U.S. law, only narrowly targeted adjustments to FIFRA and TSCA are necessary for the U.S. to fully implement our obligations under them.

For the currently listed intentionally produced global and LRTAP POPs chemicals, the legislation contains language to prohibit any production, use, processing, distribution in commerce and disposal operations that may be inconsistent with treaty obligations. It also contains provisions for specific exemptions from the prohibitions such as those needed for research purposes, consistent with the agreements.

The Administration's legislative language directly tracks obligations in the PIC Convention relating to notice of control action, export notification, export controls and labeling. With these provisions, the U.S. will be able to effectively and expeditiously implement this important Convention.

The Bush administration is fully committed to the listing of additional chemicals to the global POPS and regional LRTAP POPs agreements. In fact, that's why the Administration's legislative draft contains information collection provisions that will ensure that the U.S. is as informed as possible of the risks, benefits, production, uses and other pertinent factors concerning candidate chemicals when it is negotiating amendments to add future chemicals.

The Administration believes the processes set forth in Article 8 of the POPs Convention and the LRTAP Executive Body Decision 1998/2 for identifying candidates for listing chemicals are sufficiently rigorous and science based and are fully supported by this Administration. We are confident that they will identify strong candidates for listing based on a scientific risk assessment. However, the parties must still work through the details of a decision process for evaluating cost and other information for listing additional substances under POPs. The Administration is firmly committed to maintaining the high degree of analytical and scientific rigor that has led to the international recognition for its sound scientific risk assessments and regulatory decision making. At this time, we do not have enough experience with how, after a decision that a chemical meets certain scientific criteria for listing, the Conference of the Parties (COP) of the global POPs Convention or the Executive Body of the LRTAP POPs Protocol will weigh and balance risk assessment, socioeconomic and other factors (listed in Annex F of the global POPs Convention and in Executive Decision 1998/2 for the LRTAP POPs Protocol) when making final listing decisions and deciding on appropriate control measures for the chemical. Both Agreements explicitly contemplate bans and restrictions, and possible exemptions, as types of risk management outcomes, with chemical specific socioeconomic factors being relevant considerations. Since no chemical has been through the listing process, however, it is unclear how the COP/Executive Body will weigh these factors and arrive at appropriate control measures.

Recognizing that a provision to address the listing of additional chemicals is not required to bring the U.S. into compliance upon entry into force of these agreements, the Administration determined that it would be best to consider these risk management issues in the context of the detailed POPs listing process. We believe the experience gained at the negotiating table when considering additional chemicals will be of great value in conducting the necessary analyses for EPA action. Such valuable information, combined with our experience in implementing established domestic regulatory standards under FIFRA and TSCA will help ensure that EPA's decisions regarding newly listed POPs result in the most appropriate and balanced risk management decisions.

The Administration would also like to recognize Chairman Jeffords and Senator Smith for their significant efforts to support the global POPs Convention and LRTAP POPs Protocol. We are in the process of reviewing the Chairman's implementing legislation, but have not completed our analysis of all of the changes proposed by the bill. Thus, at this time, we have not developed a formal position on S. 2118. However, Administrator Whitman and I are committed to working with

Senator Jeffords, Senator Smith, Members of the Committee and all Members of Congress to ensure expeditious enactment of the best legislation possible to implement the POPs, PIC and LRTAP agreements.

IV. A CALL FOR SWIFT RATIFICATION

The Administration is seeking swift ratification of these Agreements and, with your support, we will retain our current position as a very active player in their implementation. We believe that it is especially important to be at the table as a party when crucial early implementation decisions are being made and when parties, including the U.S. submit proposals to add new chemicals to the global POPs and LRTAP POPs Protocol's control annexes. As you may know, the United Nations Environment Program (UNEP) intends to hold a forum at the World Summit on Sustainable Development in Johannesburg in August to encourage countries to deposit their instruments of ratification for the POPs Convention with UNEP at the Summit. As a result, the Stockholm Convention may come into force soon and it is important that the U.S. be a party at that time so that the U.S. can play a strong role from the outset of the Convention. Furthermore, the United States would like to demonstrate its ongoing commitment to the goals of this important treaty and by our example encourage other countries to ratify the Convention.

V. RATIFICATION IS A U.S. INTEREST

The Administration is very proud of the U.S.'s leadership role on these very important environmental treaties. I am especially proud of the POPs treaty because it provides a perfect example of how industry, business and environmental interests have worked together to resolve serious environmental issues. These three agreements illustrate how much can be accomplished in support of common environmental goals. Upon ratification, EPA will continue to work with various industry and environmental organizations on implementation of the Convention. Together with our domestic stakeholders and international organizations, we will support the growth of the capacity of developing countries to meet the imperative of the sound management of chemicals.

Thank you for the opportunity to discuss these international environmental agreements this afternoon. Again, I want to thank you for your support and leadership and assure you that President Bush, Administrator Whitman and I are looking forward to working with the committee to ratify these important agreements and finalize the implementing legislation. I will be pleased to answer any questions.

STATEMENT OF BRUCE ALBERTS, PRESIDENT, NATIONAL ACADEMY OF SCIENCES

Chairman Jeffords and members of the committee, thank you for the invitation to discuss before your committee the proposed bill to implement the Stockholm Convention on Persistent Organic Pollutants (POPS) and the Convention on long-range Transboundary Air Pollution. I am very pleased to be herewith you today.

Since the role of the National Academy of Sciences and its affiliated institutions is to serve as a source of independent expert scientific, engineering, and medical advice, I will limit my testimony to scientific issues and the possible involvement of our operating arm, the National Research Council, in reviewing candidate chemicals for possible future inclusion in the conventions, starting with general issues and moving to specific drafting issues, I will defer to others to address the political and policy issues associated with alternative convention ratification strategies.

Section 107 "Research Program to Support POPs Convention" contains a provision in which EPA may enter into a contract with the National Academy of Sciences to:

> "(1) develop and apply screening criteria for adding new substances or mixtures to the POPs Convention
>
> (2) propose alternative designs for a global monitoring program aimed at identifying persistent and bioaccumulative chemical substances . . . and
>
> (3) recommend priority candidates . . . for possible nomination to the Persistent Organic Pollutants Review Committee . . . of the POPs Convention."

It also requests that we consider a list of specific chemicals.

The National Academies are prepared to assist the U.S. Government by providing independent advice on scientifically sound methods for screening and analyzing potential POPS. We are also prepared to provide advice on the scientific and technical aspects of alternative designs for global monitoring programs. In addition, the National Academies would be able to prepare reports compiling and assessing relevant scientific data on specific; chemicals and mixtures. Indeed, the National Academies

have a long history of providing such advice, in the context of other laws and programs.

In providing this type of assistance to the government, the National Academies convene groups of experts from the academic community and other organizations who serve without compensation to produce peer-reviewed reports. These experts are carefully chosen to provide an appropriate range of expertise and a balance of perspectives while avoiding conflicts of interests. Our committees solicit and consider public input. The members of our committees serve in their individual capacities and not as representatives of any stakeholder organizations; their deliberations result in a scientific consensus, not a multi-stakeholder consensus. We do not have the same notice and public comment typical of the development of Federal regulatory policies. We do not consider it our role to recommend specific policies for Federal regulation; instead, our role is to provide independent expert advice on the scientific basis relevant to such policies.

The National Academies would be able to produce; an expert report recommending alternative designs for a global monitoring; program aimed at identifying persistent and bioaccumulative chemical substances. Such alternative designs would be driven primarily by scientific and practical considerations.

I turn now to the remaining two requests for assistance from the National Academies that are specified in Section 107 of the proposed bill. Executive Body Decision 1998/2 of the Convention on Long-Range Transboundary Air Pollution and Annex D of the Stockholm Convention contain technical criteria for screening prospective chemicals for persistence, bioaccumulation, potential for long-range environmental transport, and adverse effects. It would be entirely appropriate for the National Academies to compile and evaluate data on chemical to determine whether or not they meet these criteria, or any similar set of specified technical criteria.

Annex E of the Stockholm Convention and Decision 1998/2 require that "risk profiles" be developed for candidate chemicals. The following types of information are to be included as far as possible.

- sources (production, uses, and environmental releases),
- hazard assessment.
- environmental fate,
- monitoring data.
- exposures.
- bioavailability,
- previous assessments and
- previous risk management actions
- availability of alternatives.

These risk profiles are used to make decisions on adding specific chemicals to these conventions. These final decisions involve appropriately, not only scientific criteria, but also policy and political considerations, such as costs, benefits, and other socioeconomic factors.

Since non-scientific factors are properly involved in such considerations, the National Academies are reluctant to be asked to recommend that specific chemicals be added to they POPS Convention. Rather, we propose that, if asked to be involved, the National Academies be requested: (1) to recommend scientific principles and methods for preparing risk profiles, and (2) to apply such principles and methods to prepare risk profiles, with information available in the United States, for the chemicals listed in Section 107 of the proposed bill, as well as for chemicals with similar attributes.

According to the above proposal, the EPA and the U.S. Government would use the risk profiles we develop to make the decisions on what chemicals to propose for inclusion in the POPS Convention. These decisions would incorporate non-scientific policy considerations as well as the scientific considerations that we provide.

Note that many chemicals can be expected to meet the screening criteria of Annex D of the Stockholm Convention but are neither used in commerce in the United States nor found in the environment in substantial quantities. Less than 100,000 chemicals are currently in. commerce, out of more than 38 million chemicals reported in the scientific literature. Only a small percentage of the 100,000 chemicals in commerce are in large-scale production, and many of those are not in processes or uses that are likely to result in significant releases to the environment. It would clearly be inappropriate to recommend chemicals for inclusion in the convention if they are not of environmental significance, and it would be inappropriate for the National Academies to ask experts to volunteer their time to review such chemicals.

If called upon to develop the suggested risk profiles, the National Academies would need the full cooperation of the EPA. For example, preparing such profiles would require the assistance of the agency in obtaining unpublished data and infor-

mation from agency data bases and files as well as other internal agency information.

Section 107 (b) of the bill reads, "The Administrator may offer to enter into a contract with the Academy. . .". However, the language thereafter mandates the specifics of such a contract. We would urge that these mandates be softened to recommendations. Such softening might remove disincentives for EPA and the Academy to enter into such a contract.

Included in the specifics is a January 1, 2004 date for the National Academies to complete a report. We recommend the report be described as a "progress" report to avoid any misinterpretation of the nature of the report. The many activities called for in this bill cannot all be completed in 18 months or less. Furthermore, the bill fails to specify a starting date for the contract, so the time available for the National Academies to perform our work might be considerably less than 18 months after the contract is received. We suggest that; the requested outcome should be more than a single report. Instead, Section 107 could provide a basis for the National Academies to furnish longer-term support to the U.S. Government in carrying out its responsibilities under the Stockholm Convention and the Convention on Long-range Transboundary Air Pollution.

The term "research" is used in several places in the section. However, we want to be clear thaw, if the National Academies undertake these activities, we will not be generating new scientific data. Rather we will be compiling, analyzing, synthesizing, and reporting data and information that has already been developed by others.

In sum, the National Academy of Sciences, through its operating arm, the National Research Council is prepared to assist the U.S. Government in carrying out its responsibilities under the Stockholm Convention and the Convention on Long-range Transboundary Air Pollution. To do so would entail the development of several reports providing independent scientific advice, leaving the weighing of the important policy and political considerations to the government.

Again, thank you for the opportunity to discuss this important bill with you today.

RESPONSE OF WARREN MUIR TO ADDITIONAL QUESTION FROM SENATOR JEFFORDS

Question. In your testimony you offer to "recommend scientific principles and methods for preparing risk profiles." Don't methods already exist for preparing risk profiles?

Response. Although the Convention describes certain screening criteria for chemicals and scientific information requirements for the risk profiles, some of the requirements are stated in very general terms and are subject to wide interpretation. The National Academies would propose to further define and expand upon these requirements to create useful scientific methods and principles for application to the evaluation of potential persistent organic pollutants.

STATEMENT OF JOHN BUCCINI, CHAIRMAN, UNEP INTERGOVERNMENTAL NEGOTIATING COMMITTEE

Mr. Chairman and members of the committee. My name is John Buccini and I am here today, in response to your invitation, in my capacity as Chairman of the UNEP Intergovernmental Negotiating Committee that developed the Stockholm Convention on Persistent Organic Pollutants (POPs). Recognizing that I am here primarily to respond to any questions that the committee may pose, I will confine my opening remarks to a few observations about the treaty and its development.

The Stockholm Convention has as its objective, the protection of human health and the environment from POPs. It was developed in response to an acceptance by the international community of the need to take collective global action to reduce and/or eliminate the generation and release of POPs. This acceptance was based on the recognition that the continued generation and release to the environment of POPs is not a sustainable practice as once released into the environment, POPs undergo widespread environmental distribution through natural processes, contaminate environmental media and living organisms including the food chain, persist for very long periods of time, and pose a threat to present and future generations of both humans and wildlife.

The process of developing the convention was initiated in May 1995 by the United Nations Environment Programme (UNEP). In March 1996, an agreement was reached that there was sufficient scientific evidence available to justify taking immediate international action on POPs. This agreement has underpinned and given a sense of urgency to the efforts made by stakeholders from all sectors of society

including governments, intergovernmental organizations, nongovernmental organizations (including both industry and public interest groups) and aboriginal groups.

The activities involved in developing the convention have resulted in a broad acceptance of the urgent need for action in countries around the world. This is demonstrated by the fact that less than 1 year after the convention was opened for signature in Stockholm on May 23, 2001, 128 countries and the European Community have signed the treaty and 7 have become Parties through ratification or accession. Another indicator is the number and nature of the actions that stakeholders are taking to address the risks posed by POPs. Based on an annual UNEP survey of representatives of all stakeholder groups, about 110 countries are already active in taking action to address POPs and actions are also being taken by the public, industry and aboriginal and public interest groups around the world. As an example, the International POPs Elimination Network was established during the negotiation of the treaty and today includes over 400 public interest groups from countries around the globe with programs to address POPs issues at the local, national, regional and international levels. This is indeed encouraging to note.

Let me now turn to the convention itself. In my view, there are three key provisions in the treaty—the controls on 12 POPs, the evaluation of future candidates for addition to the treaty, and financial and technical assistance for developing countries and countries with economies in transition.

The control provisions of the convention address three areas: intentionally produced POPs, unintentionally produced POPs, and POPs in stockpiles and wastes.

For intentionally produced POPs (industrial chemicals and pesticides), the goal of the convention is to eliminate their production and use and measures are specified for 10 chemicals. To prevent the introduction into commerce of new POPs, Parties with regulatory and assessment schemes for industrial chemicals and pesticides will, in conducting assessments of new substances, take "measures to regulate with the aim of preventing the production and use of" new POPs. In assessing the risks posed by in-use substances, Parties will consider the screening criteria for candidates for addition to the Convention (specified in Annex D) to identify, at the earliest opportunity, candidates for further consideration.

For unintentionally produced POPs (byproducts of industrial and combustion processes, such as dioxins and furans) the convention goal is the continuing minimization and, where feasible, the ultimate elimination of the total releases of such POPs derived from anthropogenic sources. An approach has been developed that enables each country to define its priorities, develop a national action plan within 2 years of entry into force of the convention, and then implement the plan.

For stockpiles and wastes, the goal is to ensure the environmentally sound management of stockpiles that consist of or contain intentionally produced POPs, and of wastes, including products and articles upon becoming wastes that consist of, contain or are contaminated with intentionally or unintentionally produced POPs. Measures are specified to prevent the reuse or recycling of POPs and to manage these materials to prevent releases to the environment of POPs during storage, handling, transport or disposal activities.

The second major provision is a science-based approach to systematically identify and review future candidate chemicals for addition to the convention. The process and scientific criteria for this provision are specified in the convention and a POPs Review Committee will be established at the first meeting of the Conference of the Parties to evaluate nominations submitted by Parties. Considerable attention was paid to the need for openness and transparency in this process to ensure that all candidates will be fully and fairly evaluated.

In the third major provision, the convention specifies that developing countries and countries with economies in transition will need technical and financial assistance and that regional and subregional centres will be established for capacity building and the transfer of technology to assist countries in need. Developed countries have agreed to provide technical assistance and new and additional financial resources to meet agreed full incremental implementation costs. The Global Environment Facility is named as the principal entity of the interim financial mechanism to handle funding of capacity building and other related activities. Financial support has already begun to flow and an estimated 50 countries have already initiated action to prepare their national plans to implement the convention. This is indeed encouraging.

In my view, the Stockholm Convention represents a significant advance in protecting health and the environment from what many regard as the most toxic chemicals that have ever been produced. There is a high level of interest and activity among all stakeholder groups in the POPs area and I expect that this will continue into the future. In this regard, I am pleased to note that you have invited both

industry and environmental non-government organizations to appear before you during this session.

The current rapid pace of signature and ratification of the convention augurs well for continued international action on POPs. The convention will enter into force 90 days after 50 Parties have ratified it. Many contend that the urgent nature of POPs problems warrants expedited entry into force and concerted, collective actions to address these problems and their solutions. Some stakeholders have urged governments around the world to ratify the POPs treaty prior to the Johannesburg Summit in August of this year.

In closing, I wish to state my hope that the United States will be among the Parties attending the first Conference of Parties, given the important decisions that must be taken at that meeting to implement the convention and the role that the United States can play in these matters. I look forward to the United States being a full and effective contributor in implementing the new international controls on POPs under the Stockholm Convention. I note that the U.S. Government is proceeding in an expeditious manner to ratify and implement the convention and I am pleased to be here today to provide any information that may be of assistance in that process.

STATEMENT OF BROOKS B. YEAGER, VICE PRESIDENT FOR GLOBAL THREATS, WORLD WILDLIFE FUND

Mr. Chairman and members of the committee: On behalf of World Wildlife Fund's 1.2 million members, thank you for the opportunity to testify on the implementing legislation for the Stockholm Convention on Persistent Organic Pollutants (POPs). Known worldwide by its panda logo, World Wildlife Fund (WWF) is dedicated to protecting the rich biological diversity on which the prosperity and survival of human societies depends. As the leading privately supported international conservation organization in the world, WWF has sponsored conservation work in more than 100 countries since 1961.

For the record, I am Brooks Yeager, Vice President for Global Threats at WWF, where I supervise campaigns to conserve global forests and ocean resources, to avert damage to the global environment from climate change and toxic pollution, and to ensure the environmental sustainability of global commerce. Before joining WWF, I served as the Deputy Assistant Secretary for Environment and Development at the U.S. State Department. At State I was responsible for the development and negotiation of U.S. Government policy in a range of bilateral and global environmental discussions and undertakings. These included the Convention on Biological Diversity (CBD), the CBD Biosafety Protocol, the Global Environment Facility, the International Coral Reef Initiative (ICRI), the International Tropical Timber Organization, and United Nations forest discussions.

I also served as the United States' lead negotiator for the Stockholm POPs Convention. We are here today to discuss the implementing legislation for this groundbreaking treaty. With your permission, I will try to distinguish the views I express on behalf of WWF from those observations I can make from my involvement on behalf of the U.S. Government in the Convention's development.

The Stockholm POPs Convention represents the most important effort by the global community, to date, to rein in and ultimately halt the proliferation of toxic chemicals. It's an agreement that is at once ambitious, comprehensive, and realistic. The treaty targets some of the world's most dangerous chemicals—POPs include pesticides such as chlordane, industrial chemicals such as PCBs, and by-products such as dioxins.

POPs pose a particular hazard because of four characteristics: they are toxic; they are persistent, resisting normal processes that break down contaminants; they accumulate in the body fat of people, marine mammals, and other animals and are passed from mother to fetus; and they can travel great distances on wind and water currents. Even small quantities of POPs can wreak havoc in human and animal tissue, causing nervous system damage, diseases of the immune system, reproductive and developmental disorders, and cancers.

Persistent organic pollutants are a threat to human health, wildlife, and marine and terrestrial ecosystems in the United States and around the world. From Alaska to the Great Lakes to Florida, Americans face an insidious but largely invisible threat from POPs chemicals. Despite more than two decades of U.S. efforts to control POPs pollution, POPs used and released in other countries—often thousands of miles from our borders—continue to contaminate our lands and waterways, the food we eat, and the air we breathe.

Our government made a concerted effort, starting not long after the publication of Rachel Carson's pathbreaking *Silent Spring*, to eliminate the production and use of known POPs chemicals in the United States—yet we are still vulnerable to POPs pollution. Our environment, wildlife, and human health continue to be affected by POPs from unremediated contaminated sites at home and the production and use of POPs elsewhere in the world. This last fact is central to understanding the United States' strong national interest in the success of this global effort to reduce and eliminate POPs. POPs' mobility in air and water currents, for example, makes possible their presence along with metals and other particulates in incursions of Saharan dust into the continental United States. African dust is the dominant aerosol constituent in southern Florida's dense summer hazes. Similarly, one potential source of DDT in some salmon returns to Alaska rivers is its extensive use in Asian agriculture. A global mechanism to reduce these "chemical travelers without passports" is necessary, urgent, and very much in our national interest.

[Note: "A Toxic Hot Spots" map submitted with this testimony will be referred to in relation to statements made in the prior paragraph.]

The Stockholm POPs Convention was negotiated by more than one hundred and twenty governments over a 4-year period. As the head of the U.S. delegation, I was responsible for developing the United States' negotiating objectives and strategies, and for assuring that our national interest, positions, and requirements were reflected in the final text. Development of the U.S. position was accomplished through a thorough, not to say exhaustive, domestic process involving regular consultations with seven domestic agencies, industry, the environmental and public health communities, native American representatives, and various interested state governments, including the State of Alaska.

This careful process of developing the U.S. negotiating position is one of the reasons, I believe, that President Bush's decision to sign the Stockholm Convention last April received such broad support. WWF and many others—including the chemical industry, environmental and public health organizations and Members of Congress on both sides of the aisle—applauded the President's Rose Garden announcement. We are pleased that the President has decided to send the treaty package to the Senate for ratification.

In fact, both industry and environmental representatives made important contributions to the final product. I would like to note in particular the constructive roles played by Mr. Michael Walls and Mr. Paul Hagen of the American Chemistry Council (ACC). A letter to Governor Whitman on February 26, 2002, from Mr. Frederick Webber, ACC's President and CEO, noted that,

> ACC strongly recommends that the Administration seek the U.S. Senate's advice and consent to ratification as soon as possible. We believe it is important for the United States to continue its leadership role in the global effort to address the risks posed by POPs emissions, and believe that the United States should make every effort to be among the first 50 countries ratifying the Convention.

WWF looks forward to working with our environment and public health NGO colleagues, indigenous peoples, the ACC and other business groups, and other stakeholders in moving forward the POPs implementing legislation and treaty ratification packages as expeditiously as possible.

The POPs treaty represents a significant and innovative breakthrough in global chemicals management, calling for concrete steps to restrict or phaseout dangerous chemicals rather than relying on expensive, end-of-pipe measures such as pollution scrubbers and filters. The treaty's ambitious control obligations were developed with enough flexibility that they can be accomplished largely within the established U.S. statutory and regulatory structure. As we will discuss today, only limited adjustments are needed to the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA).

In Stockholm in May 2001, the POPs treaty was signed by 91 governments and ratified by two. Already those numbers have climbed to 128 signatories and the equivalent of 7 Parties (six ratifications and one accession) as of May 1, 2002. WWF is working with governments around the world in the hope of generating the required 50 ratifications by the World Summit on Sustainable Development in late August in Johannesburg, South Africa, so that the treaty can enter into force before the end of 2002. This is an ambitious target, but one fully justified by the urgency of the problem. WWF believes that the Johannesburg Summit presents a significant opportunity for American leadership in the global effort to eliminate POPs, as well as in broader issues affecting the global environment and human development. Achieving Senate advice and consent for ratification within the next 15 weeks is admittedly a much-accelerated timeframe, but with energy and determination we be-

lieve this is achievable. Enacting implementing legislation in such a period may be even more challenging, but we urge you to try and do so.

WWF extends heartfelt thanks and congratulations to Senator Jeffords and his staff on the Senate Environment and Public Works Committee for introducing sound, forward-thinking legislation to implement the POPs treaty.

OVERVIEW OF THE STOCKHOLM POPS CONVENTION

Before delving into the specifics of the implementing legislation, a brief overview of the structure and mechanisms of the Stockholm POPs Convention may be in order. The POPs treaty is designed to eliminate or severely restrict production and use of POPs pesticides and industrial chemicals; ensure environmentally sound management and chemical transformation of POPs waste; and avert the development of new chemicals with POPs-like characteristics.

Eliminating intentionally produced POPs. The agreement targets chemicals that are detrimental to human health and the environment globally, starting with a list of 12 POPs that includes formerly used pesticides, dioxins, and PCBs. Most of the pesticides are slated for immediate bans once the treaty takes effect. A longer phase-out (until 2025) is planned for certain PCB uses. With regard to DDT, the agreement sets the goal of ultimate elimination, with a timeline determined by the availability of cost-effective alternatives for malaria prevention. The agreement limits use in the interim to disease vector control in accordance with World Health Organization guidelines, and calls for research, development, and implementation of safe, effective, and affordable alternatives to DDT.

Ultimately eliminating byproduct POPs. For dioxins, furans, and hexachlorobenzene, parties are called on to reduce total releases with the goal of their continuing minimization and, where feasible, ultimate elimination. The treaty urges the use of substitute or modified materials, products, and processes to prevent the formation and release of by-product POPs.

Incorporating precaution. Precaution, including transparency and public participation, is a guiding approach throughout the treaty, with explicit references in the preamble, objective, provisions for adding POPs, and determination of best available technologies.

Disposing of POPs wastes. The treaty includes provisions for the environmentally sound management and disposal of POPs wastes (including stockpiles, products, articles in use, and materials contaminated with POPs). The POP content in waste is to be destroyed, irreversibly transformed, or, in very limited situations, otherwise disposed of in an environmentally sound manner in coordination with Basel Convention requirements.

Controlling POPs trade. Trade in POPs is allowed only for the purpose of environmentally sound disposal or in other very limited circumstances where the importing State provides certification of its environmental and human health commitments and its compliance with the POPs treaty's waste provisions.

Allowing limited and transparent exemptions. Most exemptions to the treaty requirements are chemical- and country-specific. There are also broader exceptions for use in laboratory-scale research; for small quantities in the possession of an end-user; and for quantities occurring as unintentional trace contaminants in products. Notification procedures and other conditions apply to exemptions for POPs as constituents of manufactured articles and for certain closed-system site-limited intermediates.

Funding commitments enabling all countries to participate. The ability of all countries to fulfill their obligations will be integral to the treaty's success. The treaty contains a sensible and realistic financial mechanism, utilizing the Global Environment Facility (GEF), through which donor countries have committed to assisting developing countries and transitional economies in meeting their obligations under the treaty. Adequacy, predictability, and timely flow of funds are essential. The treaty calls for regular review by the Conference of Parties of both the level of funding and the effectiveness of performance of the institutions entrusted with the treaty's financial operations.

THE POPS TREATY AS A CAREFUL BALANCE OF INTERESTS

In my view, Mr. Chairman, this is a solid and carefully crafted treaty. But it is also a treaty that reflects a careful balance of interests achieved through negotiation and compromise. The U.S. interest, as we articulated it during the negotiations, was to achieve an ambitious treaty that would address the global environmental damage caused by POPs, but do so in a way that would be practical, implementable, financially efficient, and consistent with the fundamental structure of our national approach to chemical regulation.

Other countries had different interests, some similar, some at variance with ours. The developing countries were neither willing nor able to invest in what to them was a new environmental priority such as POPs control and remediation without financial and technical assistance from the developed world. The G–77 negotiators insisted throughout the negotiation on a new financial mechanism, specific to the Convention, with mandatory assessments. The establishment of the GEF as the Convention's interim financial mechanism represents a genuine compromise in which the donor countries committed to provide additional financial resources, but through a channel with a proven track record and one over which donor countries exert significant control.

Similarly, the EU and a number of other countries insisted early in the negotiations on a framework for regulating byproducts such as dioxins based on quantitative baselines and mandatory percentage reductions. The United States and some developing countries considered this unrealistically rigid, in view of the highly varying levels of knowledge regarding dioxin sources in various national contexts and the even higher variation among countries in the capacity to address such sources. The framework for dioxin regulation which emerged sets an ambitious goal of 'ultimate elimination . . . where feasible,' but seeks to reach this goal through a nationally driven process of inventory, planning, and appropriate regulation, under guidance from the Convention. This too was a genuine compromise that should produce real progress in dioxin source reduction in the coming years.

The process of balancing interests and finding a unified way forward was critical to developing a consensus as to how to add new POPs chemicals to the treaty over time. All parties clearly recognized that the Convention could not be successful if it were limited solely to the 12 chemicals already on the POPs list. All parties recognized, and stated, that the Convention was intended to be dynamic rather than static. But the question of what scientific and institutional process to use in adding chemicals to the list was fraught with difficulties and misunderstandings.

For the United States, it was critical that this process be scientifically driven and not subject to political whim. Some in the U.S. feared that other countries might be almost cavalier in adding chemicals to the list, and that such an approach would distort the treaty and distract parties from the strong efforts needed to deal with the chemicals already on the list.

For some in the EU and elsewhere, it was critical that the process for adding chemicals not be subject to endless procedural roadblocks. This concern reflected an anxiety that the affected industries or governments might use procedural challenges to block the addition of chemicals that would legitimately qualify for the list on scientific grounds, and that this approach would impede the effectiveness of the Convention over time.

The procedure for adding new chemicals which was finally adopted is, once again, a genuine compromise, but one which, in my view, successfully protects the U.S. interest in every respect. It may be useful to give a short account of the negotiations on this important issue.

First, the U.S. negotiating team insisted on, and successfully negotiated, the scientific criteria according to which a nominated chemical would be evaluated. These criteria are contained in Annex D of the Convention. Then we negotiated the process through which these criteria should be applied, by a scientific screening committee (the so-called POPs Review Committee or 'POPRC'), working under the supervision of the Conference of the Parties (the COP). Finally, we negotiated the terms under which the COP would review the recommendation of this scientific group, the conditions under which the COP could make a decision to add or reject a chemical, and the procedures for party governments to accept or reject the COP's decision.

The process which emerged is described in more detail in our substantive discussion of the new chemicals provisions. Let me just say here that it offers the United States the safeguards of rigorous science, a careful review procedure, a high institutional threshold for COP decisions to add chemicals, and the right to reject the addition of a new chemical, if appropriate. In addition, this compromise also successfully resolved, at least in this context, the long-running controversy between the United States and the European Union on the subject of precaution, and did so in a way which may have useful applications in the future.

CONGRESSIONAL ACTION NEEDED TO IMPLEMENT THE STOCKHOLM CONVENTION

The Congressional action necessary to implement the POPs treaty must come in two areas—financial support and implementing legislation.

POPs Financial Support

Negotiators agreed to request that the Global Environment Facility serve as the treaty's principal financial mechanism, on an interim basis. It is WWF's strong view

that the GEF must be fully funded in order to provide sufficient resources for developing countries to begin to eliminate POPs. In order to take on the added responsibility of assisting the global effort to eliminate POPs without robbing its other critical priorities, the GEF needs to be replenished at a higher level. It will take American leadership to do this. The Administration's $177.5 million FY03 request for the GEF, including paying a portion of U.S. arrears, is an important first step towards this goal. We urge the committee to work with the Appropriations Committee to fully fund the Administration's $177.5 million request, and to allow the President sufficient flexibility within the request to position the United States to lead efforts to replenish the GEF at the level necessary.

POPS IMPLEMENTING LEGISLATION

As WWF has not had an opportunity to review the official transmission from the Administration, our comments will be directed primarily to the Chairman's bill, S. 2118. We would be happy to submit comments on the Administration's bill at a later date.

S. 2118 amends FIFRA and TSCA (the first amendments to TSCA since its enactment in 1976) to implement both the Stockholm POPs Convention and the Protocol on POPs to the Convention on Long-Range Transboundary Air Pollution (LRTAP POPs Protocol). My comments will address primarily the implementing legislation for the Stockholm Convention.

S. 2118 would provide EPA with the authority to prohibit manufacture of the 12 POPs identified in the Stockholm Convention annexes as well as other POPs subsequently added to the Convention. The legislation also includes related provisions calling on the National Academy of Sciences to develop new methodologies for screening future POPs candidates.

First and foremost, I would like to address the provisions for adding new chemicals to the treaty. Speaking both as the lead U.S. negotiator and in my capacity for WWF, I want to emphasize the importance of including the targeted statutory amendments needed to add other chemicals to the treaty.

The international community envisioned a dynamic instrument that could take into account emerging scientific knowledge about chemicals beyond the initial 12. Integral to the treaty is a process for nomination, science-based assessment (including risk profiles and risk assessments), and decisionmaking that involves both the subsidiary POPs Review Committee and the Conference of Parties before a substance can be added to the treaty's annexes. Unless this element of the treaty is considered to be self-executing, the legal mechanism to eliminate the production, use, and export of new POPs must be reflected in the implementing legislation. We applaud Senator Jeffords for including in his bill the critical amendments to TSCA and FIFRA to regulate subsequent additions.

WWF and other environmental and public health organizations stand alongside the chemical industry in voicing our support for full implementation. Again to quote from the American Chemistry Council's letter to Governor Whitman,

> ACC believes it is possible to craft appropriate amendments to TSCA and FIFRA to reflect the treaty additions process . . . . Although we have not yet seen the Administration's draft implementing legislation, we are confident that matters concerning the substance selection process can be addressed as necessary in the course of the legislative process.

It is our understanding that both the Jeffords bill and the Administration proposal are based on a legislative proposal crafted by EPA and other U.S. Government agencies last summer, but the Administration removed these essential provisions for adding new POPs from its final implementing package.

The Administration's proposal apparently envisions a case-by-case revision of domestic legislation for each POP candidate beyond the initial 12. Such an approach risks politicizing decisions that would otherwise be based on sound science. Moreover, we find it hard to believe that Congress will be willing or able to repeatedly reopen domestic laws such as TSCA and FIFRA which have rarely if ever been amended.

In our view, as I have already mentioned, the Convention as negotiated provides the U.S. with a great deal of flexibility in deciding whether and how to take domestic action against future POPs:

• *The international selection process involves input from all countries that are Parties to the Convention:* Article 8 of the Convention provides for the evaluation and addition of chemicals beyond the initial 12. Upon entry into force, the Conference of the Parties (COP) will establish a Persistent Organic Pollutants Review Committee (POPRC). Parties will submit chemical nominations to the POPRC,

which will evaluate them based on agreed scientific criteria including persistence, bioaccumulation, long-range transport, and toxicity. The POPRC must prepare a draft risk profile in accordance with Annex E, to be made available for input from all Parties and observers. The POPRC will then make recommendations that must be approved by the entire Conference of the Parties before a nominated chemical can be added to the treaty as a binding amendment.

• *The Convention does not automatically obligate the U.S. to eliminate each new POP that is added internationally*: Under Article 22(3) of the Convention, COP-agreed amendments to add new chemicals become binding upon all Parties, subject to the opportunity to "opt out" of such obligations within 1 year. However, there exists another safeguard under Article 25(4), which was proposed by the U.S., allowing a Party to declare when ratifying the Convention that it will be bound by new chemical amendments only if it affirmatively "opts in" via a separate, subsequent ratification process. The State Department has indicated that the U.S. will take advantage of the "opt in" provision, enabling the Senate to give its advice and consent to the addition of each new POP in the future.

Including these and other safeguards in the POPs treaty was a major objective of U.S. negotiators, and one which I believe was fully achieved. At the end of the long, hard concluding week of negotiations in Johannesburg in December 2000, I can say that the U.S. negotiators felt extremely pleased with the balance of the treaty, and were fully satisfied with the particular provisions for the addition of new chemicals. In my view, the Administration's reluctance to include authority to regulate new POPs—the so-called 13th POP, and beyond—cannot be justified by any need to add to an already elaborate system of protections. It is also my view that the absence of such provisions jeopardizes U.S. participation in the Convention, and will injure the credibility of the United States in this context.

We recognize that broad options exist for regulating additional POPs under U.S. law. Two major options can be considered for amending TSCA and FIFRA to deal with future POPs under the Convention. The first option would amend these statutes to allow for automatic regulation of new POPs once the United States "opts in" to the corresponding treaty amendments. This option is preferred by environmental and public health NGO's, given the other existing safeguards described above. The second option, according to Administration officials, would provide that a "rebuttable presumption" be given to the COP's decision on a new POP, while preserving the right to make a persuasive case that modified controls are necessary.

From the point of view of an environmental organization, in view of the safeguards built into the treaty mechanism itself, it would make sense to make regulation of newly listed POPs automatic, triggered by the government's decision to "opt in" to the listing under Article 25(4). While the rebuttable-presumption language contained in S. 2118 offers the additional reassurance of a domestic process of notice and comment, which may be attractive for some interests, we would note that FIFRA's special review and cancellation process, if challenged, generally takes at least 5 years and often more than 10. This is clearly far too long a period to revisit, via the procedures set forth in domestic regulations that govern the cancellation process, a scientific conclusion and policy decision already taken by the government in its role as a party to the Convention.

One solution to this dilemma might be to amend the cancellation process so that when a pesticide is listed as a POP, or in the judgment of EPA deserves to be listed as a POP, the EPA's evidentiary burden would be restricted to proving that the basic POPs listing criteria apply—thereby precluding a full FIFRA cost-benefit analysis. Administrative review would be limited to the data and scientific judgments supporting EPA's conclusion that the POPs criteria apply to a given pesticide.

In addition, it is important that the legislation ensure the elimination of any POPs pesticide—whether registered for a formulated end-use product or a technical material—to enable U.S. compliance with obligations under the POPs treaty. In other words, each of a pesticide's registrations—the one covering "technical material," i.e., the pure active ingredient, and the second for "end-use products" formulated with the addition of inert ingredients (surfactants, emulsifiers, carriers, etc.)—should count as "existing registrations" even if the pesticide is not being actively marketed or used in the United States.

In step with the cancellation action (but lagged by about 2 years to allow channels of trade to clear), whenever a pesticide is listed as a POP, EPA should be directed to phaseout all tolerances covering food uses of the pesticide. Likewise, listing as a POP should be enough to trigger EPA revocation of any "import tolerances" or exemptions. Revocation of a tolerance is the only tool the EPA has to alter how high-risk pesticides are used outside U.S. borders—and to protect human health inside the United States. Tolerances set in the United States can serve as de facto global standards because so many countries depend on access to the U.S. market and be-

cause changes in U.S. tolerance levels often trigger changes in the international Maximum Residue Limits set by Codex.

WWF is undertaking a thorough assessment of these issues as presented in S. 2118, with the intent of assisting the committee in assuring that any changes to FIFRA and TSCA effectively and efficiently carry out the aims of the POPs treaty. We would be happy to share that analysis upon completion.

Research Program to Support POPs Convention

WWF is pleased to see that S. 2118 calls for a program of scientific research to assist the U.S. Government in meeting its obligations under the POPs treaty. The bill directs the National Academy of Sciences to review scientific models and testing methods for screening candidate POPs; to propose alternative designs for a global monitoring program on persistent and bioaccumulative substances; and to recommend priority POPs chemical substances or mixtures for possible nomination to the POPRC.

WWF strongly supports these provisions, which are described in Section 107 of the bill. While not essential to the legislation amending TSCA and FIFRA, the research provisions are a valuable complement to POPs treaty implementation. They will help ensure that proposals for subsequent additions to the treaty target the worst offenders and are supported by sound testing methods, risk assessment models, and environmental monitoring techniques. Carrying out this program of rigorous scientific research on POPs places the United States in a strong position not only to nominate the most appropriate candidates for future POPs but also to question any proposed listings that are based on misguided information or inaccurate data.

The Chairman's bill also very appropriately calls upon the Administrator of EPA to submit no later than 90 days after enactment of S. 2118 the agency's final exposure and human health reassessment of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and related compounds, which are among the most dangerous POPs. In this regard, less than 2 weeks ago the U.S. General Accounting Office released a report, "Environmental Health Risks: Information on EPA's Draft Assessment of Dioxins." In its transmittal letter, the GAO notes that, according to EPA officials, the assessment will conclude that (p. 1)

> dioxins may adversely affect human health at lower exposure levels than previously thought and that most exposure to dioxins occurs from eating such dietary staples as meats, fish, and dairy products, which contain minute traces of dioxin. These foods contain dioxins because animals eat plants and commercial feed, and drink water contaminated with dioxins, which then accumulate in animals' fatty tissue.

The GAO report is significant in that it endorses the work undertaken thus far by EPA and provides a solid basis for the long-awaited reassessment to be expeditiously completed and released. Release of the dioxin reassessment will contribute important information relevant to actions that may be required to address dioxins and other unwanted byproducts under the POPs treaty, measures that would benefit citizens in the United States and other countries.

LRTAP POPS PROTOCOL

WWF also supports the inclusion of implementing legislation for the Economic Commission for Europe's Long-Range Transboundary Air Pollution (LRTAP) POPs Protocol. An outgrowth of scientific findings linking sulfur emissions in continental Europe to acid deposition in Scandinavian lakes, LRTAP was the first legally binding agreement to address air pollution problems on a broad regional basis. Parties to LRTAP include the United States, Canada, and Western and Eastern European countries including Russia.

The LRTAP POPs Protocol—the first legally binding multi-lateral instrument on POPs—was added in 1998. It targets 16 substances including the 12 POPs chemicals plus chlordecone, hexabromobiphenyl, and hexachlorocyclohexane (including lindane). It also includes obligations to reduce emissions of polycyclic aromatic hydrocarbons (PAHs) which—as with other byproduct chemicals—do not require changes to TSCA or FIFRA. Although the LRTAP POPs Protocol includes more chemicals than the POPs treaty, it is not a replacement. LRTAP deals with transmission of POPs through only a single medium (air); confines its reach to northern, largely European countries; and does not address many of the issues involving developing countries.

To date, eight countries have ratified the LRTAP POPs Protocol out of 15 needed for entry-into-force. WWF would welcome U.S. participation in these regional efforts. Given POPs' global reach, however, a realistic and comprehensive solution needs to

include developing countries as well. The United States and other donor countries must assist the developing world in coming to grips with the POPs problem—and the global POPs treaty is the ideal vehicle through which to do this.

ROTTERDAM CONVENTION ON PRIOR INFORMED CONSENT

We are pleased to see that the Administration has bundled the Rotterdam PIC Convention in its implementing legislation alongside the POPs treaty and the LRTAP POPs Protocol. The PIC treaty alerts governments as to what chemicals are banned or severely restricted, by which governments, and for what reasons. The cornerstone of the treaty is prior informed consent, a procedure that enables Parties to review basic health and environmental data on specified chemicals and to permit or refuse any incoming shipments of those chemicals. Each Party's decisions are disseminated widely, allowing those countries with less advanced regulatory systems to benefit from the assessments of those with more sophisticated facilities. Instituting PIC is a critical first step in the process of improving chemical management capacity.

The PIC treaty includes provisions for:

- alerting countries when there is an impending import of a chemical which has been banned or severely restricted in the exporting country;
- labeling hazards to human health or the environment; and
- exchanging information about toxicological findings and domestic regulatory action.

Ultimately the Rotterdam Convention will replace the voluntary PIC procedure, which has been operated by UNEP and FAO since 1989. Governments have elected to follow the new PIC procedures during this interim period before the Convention enters into force.

The PIC treaty makes an important contribution to global chemicals management by drawing attention to those substances causing the greatest harm, disseminating that information, and facilitating national decisionmaking on chemical imports. To date, the Convention has 20 Parties out of 50 required for entry into force. As with the POPs treaty, WWF would like to see the United States ratify PIC prior to the Johannesburg Summit, and we therefore support the Bush administration's decision to bundle PIC for the purpose of Senate "advice and consent" and implementing legislation.

Many of the POPs-, LRTAP-, and PIC-related legislative provisions are inter-related. WWF would be happy to work with E&PW staff to help ensure that the implementing legislation facilitates rather than hinders the efficient working of these laws.

In closing, we wish to applaud Chairman Jeffords and committee staff for the hard work and initiative that went into introducing this legislation. Full implementation of these agreements is essential to protecting the American people from the threat of POPs and other toxic substances.

Thank you for the opportunity to testify today. I would be happy to answer any questions.

WWF

The Global Toxic Chemicals Initiative

Toxic Hot Spots

Polluting Planet Earth

Modern society has developed an extensive array of synthetic chemicals over the last several decades—chemicals to control disease, increase food production, and provide convenience in our daily lives. Ironically, many of these well-intentioned chemicals are now wreaking havoc around the world, threatening wildlife and people with the very qualities that made them useful—toxicity and persistence.

Toxic

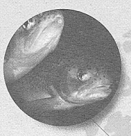
Contamination from synthetic chemicals is now **pervasive and global.** There is no species or region on Earth that is untouched by their harmful effects.

As WWF tracks the growing body of scientific research on chemical contamination and the effects of exposure, a sobering picture emerges. Wherever scientists look—the tropics, marine systems, industrial regions, the Arctic—they find the impacts of **toxic chemicals.** Wildlife, people, and entire ecosystems everywhere are threatened by chemicals that can alter sexual and neurological development, impair reproduction, and undermine immune systems.

The dangers posed by one group of chemicals called **persistent organic pollutants** (POPs) have become a pressing concern. These carbon-based chemicals pose a particular hazard because of four common characteristics: they are toxic; they resist the normal processes that break down contaminants in the body and the environment; they accumulate in body fat and are passed from mother to fetus in the womb; and they can **travel great distances** on wind and water currents.

Long distance travelers such as dioxins, PCBs, and DDT can be released in one area and then hitchhike within air masses to regions far from their original source. Through a process known as the "grasshopper effect," persistent chemicals jump around, evaporating in warm conditions and then settling in cool spots. Contamination from POPs chemicals knows no boundaries.

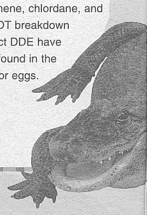
The toxic hot spots featured here demonstrate the **global threat of POPs.** They are just ten among hundreds of examples of toxic contamination from around the world. And we have only begun to scratch the surface in understanding the threats from exposure to POPs. Many of the effects will be felt by future generations, as we **pass this toxic legacy on to our children.**



Great Lakes
PCBs
Researchers have documented significant learning and behavioral problems in children exposed prenatally to PCBs and other persistent contaminants passed on by mothers who had eaten Great Lakes fish.

British Columbia, Canada
PCBs
Orca or "killer" whales swimming in the waters around Washington and British Columbia are considered among the most contaminated marine mammals in the world—they carry PCB levels of over 200 parts per million.

Florida, United States
DDT, dieldrin, chlordane
Male alligators in Florida's Lake Apopka have visible genitalia abnormalities and have difficulty reproducing. Recent studies reveal similar problems statewide. Elevated levels of a variety of contaminants, including dieldrin, toxaphene, chlordane, and the DDT breakdown product DDE have been found in the alligator eggs.

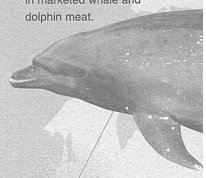


Hot Spots

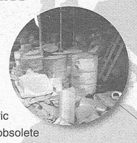
Norway
PCBs
PCBs may be weakening the immune function of Arctic polar bears and may be linked to reproductive problems and abnormal genitalia among female bears in Norway's Svalbard region.

Russia
PCBs
While most countries outlawed the manufacture of PCBs in the 1970s due to their environmental persistence and carcinogenicity, Russia continued to produce these POPs through the 1990s. Large quantities of PCBs contaminate Russian ecosystems and wildlife—such as the Arctic reindeer.

Japan
dioxins
Japanese researchers have found high concentrations of accumulated dioxins in whale and dolphin meat sold in Japan. Dioxin levels up to 172 times the tolerable daily intake were found in marketed whale and dolphin meat.

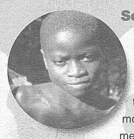


Ethiopia
obsolete pesticide stockpiles
There are over 250 sites in Ethiopia containing more than 1,500 metric tonnes of obsolete pesticides. These stockpiles commonly include old organochlorine insecticides such as aldrin, dieldrin, endrin, chlordane, heptachlor, DDT, mirex, HCB, and toxaphene. They are frequently found leaking from their containers, contaminating water, air, and soil.



Pakistan
medical waste incineration
Pakistan has been increasing its reliance on incineration to dispose of medical waste. Medical waste incineration is a significant source of dioxin and heavy metal emissions, contributing to immune function abnormalities, birth defects, child growth retardation, and other problems.

Midway Island, North Pacific
PCBs, dioxins, furans
Albatrosses nesting on remote Midway Island—thousands of miles from industrial areas—carry in their body tissue combinations of persistent contaminants such as PCBs, furans, and dioxins.



South Africa
waste incineration
South Africa relies heavily on incineration to dispose of its mounting accumulation of medical waste, and there are proposals to incinerate municipal and hazardous wastes as well. In Aloes and other areas, this practice releases dioxins into the atmosphere at the expense of wildlife and public health.

Recognizing the far-reaching effects of pollution on wildlife throughout the world, WWF's toxic chemicals initiative

- investigates toxic chemicals and their relationship to biodiversity and human health
- works to phase out and ban chemicals that threaten life on Earth
- seeks to identify and promote safe, effective, and affordable alternatives.

Addressing the Threat of Toxic Contamination

WWF's toxic chemicals work focuses on persistent organic pollutants (POPs) and endocrine-disrupting chemicals (EDCs). Although these priority areas have unique characteristics, they are closely connected.

- The POPs program centers on policy development and advocacy, such as aiming for elimination of the most dangerous, persistent pollutants like PCBs, DDT, and dioxin.
- The EDCs area investigates and addresses the impacts of synthetic chemicals on wildlife and human endocrine systems.

The toxic chemicals initiative is one of several programs that WWF has launched to address threats to the Earth's environment. Others include unsustainable timber trade, overexploited fisheries, and unrestrained emissions of greenhouse gases that contribute to global warming. To save endangered spaces, WWF is focusing conservation efforts on globally outstanding terrestrial, freshwater, and marine habitats known as the Global 200—areas that we must protect if we are to preserve the web of life. WWF also works to safeguard those critically endangered species that cannot be saved by habitat protection alone.

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PCBs/Capacitors - WWF
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To learn more about what WWF's toxic chemicals initiative is doing to address the threat of toxics and what you can do to reduce your use of and exposure to these chemicals, visit our Web site at **www.worldwildlife.org/toxics**.

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature by
- conserving the world's biodiversity
- ensuring that the use of renewable natural resources is sustainable
- promoting the reduction of pollution and wasteful consumption.

Let's leave our children a living planet.

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STATEMENT OF MICHAEL WALLS ON BEHALF OF THE AMERICAN CHEMISTRY COUNCIL

I. INTRODUCTION

The American Chemistry Council (ACC) is pleased to provide its strong support for the Stockholm Convention on Persistent Organic Pollutants (POPs), and the treaty's reasonable implementation into U.S. law. The Council and its members urge the Senate to provide advice and consent to U.S. ratification of the Stockholm Convention as soon as possible, and to approve the necessary statutory changes in short order.

The Council is the national trade association whose member companies represent more than 90 percent of the productive capacity for basic industrial chemicals in the United States. ACC members represent an industry on the cutting-edge of technological innovation and progress, whose products provide significant benefits to every sector of the global economy. The industry has been engaged in the international discussions about persistent organic pollutants (POPs) for many years, and it has a significant interest in seeing a globally harmonized approach to controls on POPs releases.

The chemical industry's support for the Stockholm Convention lies in several simple points.

• The industry's support of the Stockholm Convention is based on our commitment to product stewardship, including our goal of preventing health and environmental damage in the manufacture and use of chemical products. Our industry's product stewardship commitment is an integral part of our Responsible Care program, which is now being implemented by the chemical industry in more than 42 countries.

• The Stockholm Convention is the culmination of many different initiatives by both industry and governments to address the concerns about persistent organic pollutants. It is the next best step to assure that governments around the world take appropriate measures to control the manufacture, use and disposal of POPs and to reduce unwanted POPs emissions.

• The Convention adopts a risk-based, science-justified approach to considering possible additions to the list of chemicals. It is an approach entirely consistent with long-standing U.S. law and practice, and one that will lead to appropriate controls on those POPs chemicals that pose global threats.

II. GENERAL COMMENTS

The U.S. chemical industry's work on the POPs issue began shortly after the Rio Summit on Environment and Development, in 1992. We worked with the Intergovernmental Forum on Chemical Safety (IFCS) in its effort to map the best approaches to dealing with POPs, particularly in discussions on criteria for identifying potential POPs. The industry also participated in the negotiations sponsored by the U.N. Economic Commission for Europe (UNECE) and the North American Commission on Environmental Cooperation (NACEC) as those regional POPs programs were developed and implemented.

We were visible and positive participants throughout the negotiations that led to the Stockholm Convention, including the Expert Working Groups that met to consider and recommend criteria for identifying future POPs. The global chemical industry was an early and consistent supporter of improved international controls on persistent organic pollutants.

ACC's efforts were not limited to the international level. In 1995, ACC's Board of Directors approved a new policy on persistent, bioaccumulative and toxic substances (the class of chemicals of which POPs are a subset). The policy recognized that due to their physical and chemical properties, POPs substances should receive priority attention in industry risk characterization, risk management, and pollution prevention programs. POPs substances represent a very small percentage of chemicals in commerce in the United States, and indeed none of the UNEP product POPs are manufactured in the United States.

The American Chemistry Council believes that it is critical for the United States to continue its longstanding leadership role in the global effort to address the risks posed by POPs emissions. In order to continue in that role, however, the United States must be a full Party to the treaty. In ACC's view, the United States should be one of the first 50 countries ratifying the Stockholm Convention. As an original ratifying Party, the United States will be able to lead—and appropriately influence—the development of procedures necessary to implement the treaty at the international level. The U.S. government's ability to influence the further development and implementation of the treaty at the international level requires, simply, full U.S. participation in the agreement.

III. THE STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANTS

Several provisions of the Stockholm Convention merit comment.

The Council is particularly pleased that the treaty incorporates the use of a risk/benefit approach in implementing appropriate regulatory controls on listed chemicals, and in considering chemicals nominated as potential POPs. The treaty's reliance on technical and economic considerations should ensure that priority pollutants are targeted and meaningful control actions taken.

A substantial portion of the negotiations was devoted to the details of government obligations to reduce and eliminate releases of POPs. Under the Convention, governments are required to eliminate the production and restrict the use of pesticide and industrial chemical POPs. Governments are expected to restrict imports and exports, including exports to non-States Parties. ACC's summary of the Stockholm obligations that should be reflected in any U.S. statutory amendment is attached to this testimony.

Industry also supported the Stockholm criteria for identifying POPs, contained in Annex D, and the requirements for risk profiles and socio-economic information necessary to evaluate nominated chemicals, contained in Annexes E and F. In our view, the Convention establishes a risk-based approach to decision making on new POPs.

The treaty contains a number of key exemptions that are critical in making the Convention a workable and practical agreement. Research and development, unintentional trace contaminants for the product POPs, constituents of articles manufactured or in use as of the implementation date, and closed-system site-limited intermediates are subject to exemptions under the treaty.

The Stockholm Convention also reflects existing elements of U.S. law and policy. For example, the treaty contains a provision that government programs to evaluate new chemical substances should screen the chemicals against the POPs criteria and regulate them if appropriate. This approach is already reflected in a pre-manufacture notice (PMN) policy adopted by EPA several years ago in evaluating new chemicals under TSCA.

In the industry's view, the Convention also adopts appropriate approaches to risk management measures. For example, substitution is not a legal obligation, but constitutes an option when the risks of POPs releases cannot otherwise be managed.

IV. LEGISLATION TO IMPLEMENT THE STOCKHOLM CONVENTION

Two proposals have been tabled to implement the obligations of the Stockholm Convention in U.S. law, Senator Jeffords' bill (S. 2118), and an Administration proposal. The core implementing provisions of both approaches are substantially similar, but each raises important concerns.

Both approaches raise important questions about the status of chemicals on the UNECE POPs Protocol list that are not addressed under the Stockholm Convention. Despite the fact that the Protocol and Convention contemplate several similar restrictions on listed chemicals, the draft implementing proposals suggest significantly different approaches to the process under each of the agreements.

Both S. 2118 and the Administration's draft attempt to limit the use of information not submitted in the notice and comment processes that accompany the consideration of new chemicals under the UNECE Protocol and the Stockholm Convention. That limitation is not justified. At the early stages of the international listing discussions it cannot be determined what regulatory consequences the listing will have, or indeed whether a nominated chemical will in fact be added to the POPs list. The U.S. negotiating team should have access to information about the production, import, export and/or use of a nominated chemical. ACC believes there will be sufficient incentive for interested commercial entities to produce information on nominated chemicals without the need to limit the use of the information in any subsequent regulatory action.

Both approaches establish a continual reporting obligation on manufacturers unless EPA decides otherwise or the international decisionmaking process is concluded. It is not clear what benefit is expected from the continuing obligation to report or how it relates to the Agency's work with respect to POPs substances. Again, we believe commercial entities with an interest in a nominated chemical will have sufficient incentive to provide EPA and other U.S. negotiators appropriate information about the chemical without a continuing reporting obligation under Section 8 of TSCA.

As noted earlier, ACC has long recognized that the Stockholm Convention contemplates the addition of other POPs. We believe that U.S. implementing legislation should reflect that process. We also believe that there are a number of options available that could address both the Senate's constitutional prerogative regarding treaty amendments and Congress' interest in practical changes to statutory requirements.

We have attached a copy of correspondence ACC sent earlier this year to EPA Administrator Christine Todd Whitman, which outlines our view that the issue of additions can be addressed in implementing legislation.

ACC is also concerned that S. 2118 addresses matters that are not strictly related to the obligations and responsibilities established by the Stockholm Convention. These provisions raise concerns about U.S. acceptance of the internationally accepted criteria for identifying POPs, and the possible duplication of existing EPA programs on persistent, bioaccumulative and toxic substances (PBTs), among others. In order to assure that the Senate can approve the Convention and the implementing package as soon as possible, we believe it critical that the legislation address only those issues required by the treaty.

The American Chemistry Council believes that U.S. implementation of the Stockholm Convention should be guided by certain principles. In brief, these principles are:

• Full implementation of the Convention's obligations in U.S. law, through appropriate amendments to the Toxic Substances Control Act (TSCA) and the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

• TSCA and FIFRA amendments that are narrowly drawn to implement only the obligations imposed by the Stockholm Convention.

• TSCA and FIFRA amendments that focus on the specific measures required by the Stockholm Convention, and which avoid the possibility of confusion or complexity with respect to U.S. implementation. There is ample precedent for the implementation of U.S. treaty obligations in this manner.

V. IMPLEMENTATION OF THE ROTTERDAM CONVENTION ON PRIOR INFORMED CONSENT

ACC also supports Senate advice and consent to ratification of the Rotterdam Convention on Prior Informed Consent. This Convention—negotiated on the basis of a very successful government-to-government information exchange system—also requires amendments to TSCA and FIFRA if the United States is to fully implement the treaty. Because the Rotterdam Convention requires these amendments, ACC believes it makes sense to include appropriate implementing language in the same legislation designed to implement the Stockholm Convention.

VI. CONCLUSION

The American Chemistry Council believes that the Stockholm Convention is an important step in securing international action on POPs. The treaty establishes a harmonized global approach to the necessary controls on POPs releases, and should produce meaningful improvements in public health and environmental protection. Appropriate amendments to TSCA and FIFRA that reflect the treaty's obligations can be crafted, particularly to address the issue of new chemicals added to the list of POPs. ACC looks forward to working with this committee and the Administration as those amendments are drafted.

Stockholm Convention on Persistent Organic Pollutants

Obligations of the Parties to be Implemented in U.S. Law

Article	Requirement
Art. 3.1—Measures to reduce/eliminate exposures from intentional production and use.	(a) Prohibit and/or eliminate production, use, import and export of Annex A chemicals, subject to Annex A provisions. (b) Restrict production and use of Annex B chemicals.
Art. 3.2	(a) Permit import only for the purposes of (1) environmentally sound disposal or (2) for a permitted use under Annex A or B. (b) Permit export only for the purposes of (1) environmentally sound disposal, (2) to a State Party for permitted use, or (3) to a non-State Party upon identification of the use and certification that the non-State Party is committed to minimizing releases, has developed strategies to deal with related wastes, and notify WHO about DDT uses. (c) Prohibit the export of Annex A chemicals for whichproduction or use exemptions are no longer in effect, except for environmentally sound disposal.
Art. 3.3	Parties with new chemical and pesticide assessment regimes shall take regulatory measures with the aim of prevent the production and use of new chemical or pesticide POPs.
Art. 3.4	Parties with chemical and pesticide assessment programs shall take into account the Annex D paragraph 1 criteria when conducting assessments of existing uses.
Art. 3.5	Excludes laboratory scale research and reference standards from the regulatory measures imposed under Article 3.

Stockholm Convention on Persistent Organic Pollutants—Continued

Obligations of the Parties to be Implemented in U.S. Law

Article	Requirement
Art. 3.6	Parties shall take appropriate regulatory measures to assure that human and environmental exposures from exempted production and use are minimized.
Art. 4—Register of specific exemptions.	Assumes national measures to extend, withdraw or further restrict exempted production and use when the five-year exemption period expires.
Art. 5—Measures to reduce or eliminate releases from unintentional production.	Parties to take the following minimum measures to reduce emissions of by-product POPs from anthropogenic sources with the goal of minimizing those emissions and where feasible, to eliminate them. (a) develop a national (or regional) action plan (NAP) within 2 years to identify, characterize and address the release of by product POPs; (b) promote available, feasible and practical measures to achieve release reduction or source elimination; (c) promote and where appropriate require the development and use of substitute materials, products and processes that prevent the formation and release of by-product POPs; (d) promote and in accord with the NAP require implementation of best available technology for new sources within source categories meriting such an approach. BAT requirements to be implemented as soon as possible but within 4 years. Parties shall promote best environmental practices for identified source categories; (e) promote for existing source categories, in accordance with NAP, BAT and BEP, and for new sources not addressed in subparagraph (d);
Art. 6—Measures to reduce or eliminate releases from stockpiles or wastes.	Parties to ensure that stockpiles consisting of or containing Annex A or B chemicals and wastes, and products contaminated with Annex A, B, or C chemicals upon becoming wastes are managed in a manner protective of human health or the environment, by (a) develop strategies for identifying covered stockpiles and wastes; (b) identify relevant stockpiles by employing the strategies; (c) manage stockpiles in a safe, efficient and environmentally sound manner; (d) (1) take appropriate measures to assure that stockpiles and wastes are handled, transported and stored in an environmentally sound manner, (2) disposed of in a way that the POP content is destroyed or irreversibly transformed or otherwise disposed of in an environmentally sound mannerand (3) POPs are not permitted to be recycled, reclaimed or reused, not transported across international boundaries except in accord with existing international standards and rules. (e) endeavor to develop appropriate strategies for identifying site contaminated with Annex A, B or C chemicals and if remediated, to do so in an environmentally sound manner.
Art. 7—Implementation Plans	(1) Each Party shall develop plan to implement its obligations under the treaty, transmit it to other parties within 2 years, and review and update the plan on a periodic basis. (2) In developing plans, Parties shall cooperate and consult with other stakeholders. (3) Parties shall endeavor to integrate POPs plans with sustainable development strategies.
Art. 9—Information Exchange	Parties shall facilitate or undertake the exchange of information relevant to reduction and/or elimination of POPs production, use and release; and on alternatives, including their risks and socio-economic costs.
Art. 10—Public information, awareness and education.	Each Party shall within its capabilities promote and facilitate awareness and information on POPs (particularly health effects), public access to information on POPs, and training.
Art. 11—Research, development and monitoring.	Each Party shall within its capabilities encourage and/or undertake appropriate research, development and monitoring programs, including support for national programs, intergovernmental research.
Art. 12—Technical assistance	Parties shall cooperate to provide timely technical assistance to developing countries.
Art. 13—Financial resources and mechanisms.	Each Party undertakes to provide, consistent with its capabilities, financial support and incentives with respect to implementation of the treaty. Developed country Parties shall provide new and additional financial resources to developing countries and countries with economies in transition to meet the full incremental costs of implementation measures.
Art. 15—Reporting	Each Party shall report to the Conference of the Parties on its implementation measures, statistical data on the amount of Annex A and B chemicals produced, imported and exported, and (to the extent practicable) a list of States importing or exporting such chemicals.

Stockholm Convention on Persistent Organic Pollutants—Continued

Obligations of the Parties to be Implemented in U.S. Law

Article	Requirement
Art. 25.4—Ratification, acceptance, approval or accession.	Permits Parties to clarify in its instrument of ratification that with respect to amendments to annexes, no amendment will be effective as to that Party except upon deposit of an instrument of ratification, acceptance, approval or accession. Assuming a Party wishes to utilize this clarification, some national process for making such ''opt-in'' decisions should be addressed.

AMERICAN CHEMISTRY COUNCIL,
Arlington, VA, February 26, 2002.

Hon. CHRISTINE TODD WHITMAN, Administrator,
U.S. Environmental Protection Agency,
Washington, DC.

Dear GOVERNOR WHITMAN: I wanted to follow up on our brief discussion at the World Economic Forum concerning the U.S. industry's view of the Stockholm Convention on Persistent Organic Pollutants (POPS).

The American Chemistry Council (ACC) and its member companies have long supported the effort to develop and implement a global treaty governing POPs. As you know, we strongly supported the Administration's decision to sign the POPs treaty, and we are on record as supporting the treaty's reasonable implementation into U.S. law.

ACC strongly recommends that the Administration seek the U.S. Senate's advice and consent to ratification as soon as possible. We believe it is important for the United States to continue its leadership role in the global effort to address the risks posed by POPs emissions, and believe that the United States should make every effort to be among the first 50 countries ratifying the Convention.

Based on media reports we understand the Administration has drafted a legislative proposal to amend the Toxic Substances Control Act (TSCA) and the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) to implement the treaty obligations. The media reports also indicated that the Administration would not propose amendments to address additional chemicals listed under the Stockholm Convention process. The treaty contemplates the listing of other POPs in the future, and provides a criteria and risk-based process to consider nominations made by governments. ACC believes it is possible to craft appropriate amendments to TSCA and FIFRA to reflect the treaty additions process. If the Administration has already made a decision to proceed without provisions regarding additions, that decision should not further delay the submission of the treaty and the Administration's proposal to Congress. Although we have not yet seen the Administration's draft implementing legislation, we are confident that matters concerning the substance selection process can be addressed as necessary in the course of the legislative process.

ACC looks forward to working with you as preparations are made for U.S. implementation of the Stockholm Convention. If we can provide additional information, please contact me or Michael Walls, Senior Counsel, at 703-741-5167.

Sincerely,

FREDERICK L. WEBBER,
President and CEO.

STATEMENT OF KAREN L. PERRY, M.P.A., DEPUTY DIRECTOR, ENVIRONMENT & HEALTH PROGRAM, PHYSICIANS FOR SOCIAL RESPONSIBILITY

Good morning, Mr. Chairman and members of the committee. My name is Karen Perry, and I am speaking to you today on behalf of Physicians for Social Responsibility (PSR). PSR is a national membership organization representing more than 22,000 physicians, health care professionals, and concerned citizens committed to protecting public health from environmental hazards. We welcome the opportunity to appear here today and present PSR's views on issues surrounding the implementation of the Stockholm Convention on Persistent Organic Pollutants (POPs).

PSR's concern about POPs dates back to the mid-1990's, when an early draft of the U.S. Environmental Protection Agency's (EPA) dioxin reassessment indicated that hospital waste incinerators were a major source of dioxin, a potent POP. Based on the medical tenet of "first, do no harm," PSR and other public health groups

began advocating for a phaseout of incineration in favor of less-hazardous forms of medical waste treatment. A few years later, an Intergovernmental Negotiating Committee began the task of crafting a global convention on dioxin and other POPs. From 1998 to 2001—throughout the entire period of negotiations—PSR served as the Secretariat for a global network of more than 400 non-governmental organizations from 75 countries, all committed to the phaseout and elimination of POPs. Today, the ratification and full implementation of the Stockholm Convention by the United States is among PSR's top priorities.

POPS ARE HAZARDOUS TO AMERICA'S HEALTH

Signed by EPA Administrator Whitman and representatives of nearly 100 other countries last May, the Stockholm Convention targets a group of chemicals known to be detrimental to human health and to the environment.

POPs share several important characteristics that make them particularly troubling to the public health community. First, POPs are fat soluble, and are thus able to move from air, water, and soil into food chains. Animals, including livestock, ingest POPs that are deposited in the environment. These POPs accumulate in the animals' fatty tissues, contaminating meat, fish, eggs, and dairy products. We know from a number of studies that the majority of Americans' exposure to POPs occurs through consumption of these foods. Recent food sampling has measured levels of several POPs in the food supply of various regions in the U.S. Freshwater fish were found to be the most significant source of dioxins, furans, and dioxin-like PCBs. Even organically produced meats and dairy products routinely contain POPs because these pollutants are everywhere in the environment. Human breast milk has also been sampled and found to have significant levels of some POPs.[1] Based on analyses of these samples, it is estimated that nursing infants have a much higher exposure to POPs, relative to body weight, than adults. Other highly exposed populations include Alaska Natives and other Arctic indigenous peoples, and subsistence and recreational fishers in the Great Lakes and other regions.

POPs have been linked to a variety of serious human health effects, including cancer, reproductive and developmental effects, and neurological deficits. Exposure even to extremely low levels of some POPs can alter the function of the endocrine system by mimicking or blocking the action of natural hormones. POPs have been implicated in adverse effects on cognition, precocious puberty, female reproductive problems including endometriosis and difficulty conceiving, and in males, declining sperm counts and malformations of the penis and testicles.

Children and developing fetuses are most at risk. Human and animal studies provide disturbing evidence that prenatal exposure to low levels of some POPs can result in decreases in IQ and short-term memory; delayed psychomotor development; abnormal reflexes; and speech problems.[2,3,4,5,6] Serious structural abnormalities, retarded growth, and functional changes have also been observed in lab animals exposed to low levels of POPs during gestation.[7]

Toxicological and epidemiological studies have found that several POPs, including dioxins, PCBs, and DDT, have the potential to cause cancer in humans. At the same time, it has been observed that incidence rates of breast cancer, testicular cancer, and prostate cancer are on the rise in the U.S. Researchers are investigating the role that endocrine-disrupting POPs might play in the development of cancers at these hormonally sensitive sites.

There is limited human epidemiological evidence for immune effects from POPs exposure. However, laboratory animals exposed to dioxin showed evidence of immune system suppression, resulting in some forms of cancer and decreased resist-

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[1] Schecter A et al. 2001. Intake of dioxins and related compounds from food in the U.S. population. Journal of Toxicology and Environmental Health (Part A) 63:101–118.

[2] Brouwer A et al. 1999. Characterization of potential endocrine-related health effects at low-dose levels of exposure to PCBs. Environmental Health Perspectives 107 (Suppl. 4): 639–649.

[3] Jacobson JL and SW Jacobson. 1996. Intellectual impairment in children exposed to polychlorinated biphenyls in utero. New England Journal of Medicine 335:783–789.

[4] Rogan WJ et al. 1988. Congenital poisoning by PCBs and their contaminants in Taiwan. Science 241:334–338.

[5] Patandin S et al. 1999. Effects of environmental exposure to polychlorinated biphenyls and dioxins on cognitive abilities in Dutch children at 42 months of age. Journal of Pediatrics 134(1):33–41.

[6] Markowski VP et al. 2001. Altered operant responding for motor reinforcement and the determination of benchmark doses following perinatal exposure to low-level 2,3,7,8-tetrachlorodibenzo-p-dioxin. Environmental Health Perspectives 109(6):621–627.

[7] Faqi AS et al. 1998. Reproductive toxicity and tissue concentrations of low doses of 2,3,7,8-TCDD in male offspring rats exposed throughout pregnancy and lactation. Toxicology and Applied Pharmacology 150:383–392.

ance to infections. It has been suggested that this is one of the most sensitive toxicological outcomes for dioxin exposure, for example. A study of Dutch preschool children has linked prenatal and lactational exposure to PCBs and dioxins to increased susceptibility to infectious diseases lasting into childhood.[8]

THE ADDITION OF FUTURE POPS IS AT THE HEART OF THE STOCKHOLM CONVENTION

While the Stockholm Convention begins with an initial list of 12 POPs, including those I have mentioned, it is by no means limited to that list. From the very start of the negotiations, the international community envisioned a dynamic instrument that could take into account emerging scientific knowledge about chemicals beyond the initial 12. In a series of intersessional meetings during the treaty negotiations, an experts group hammered out a set of science-based screening criteria for POPs that was incorporated into the final agreement. In short, the addition of POPs beyond the initial 12 was not an afterthought.

Indeed, the final convention spells out the science-based process for evaluating and adding POPs quite clearly in Article 8. Upon entry into force, the Conference of the Parties (COP) will establish a Persistent Organic Pollutants Review Committee (POPROC). Parties will submit chemical nominations to the POPROC, which will evaluate them based on agreed scientific criteria including persistence, bioaccumulation, long-range transport, and toxicity. The POPROC must prepare a draft risk profile in accordance with Annex E, to be made available for input from all Parties and observers. The POPROC will then make recommendations that must be approved by the COP before a nominated chemical can be added to the treaty as a binding amendment. The U.S. has reserved the right to "opt-in" to each amendment via a separate, subsequent ratification process.

It is worth noting that the universe of POPs that might be added to the Stockholm Convention over the long term is not vast. Application of the science-based criteria set out in the treaty is likely to result in the addition of a few dozen additional POPs—not hundreds or thousands.

S. 2118 CONTAINS A WORKABLE MECHANISM FOR ADDING POPS

Throughout the treaty negotiations, the U.S. delegation acknowledged that changes to the Toxic Substances Control Act (TSCA) and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) would be necessary to enable EPA to ban the manufacture, use, and export of the chemicals named in the treaty, and to regulate new chemicals identified as POPs pursuant to the agreed science-based process. A briefing for NGO's in July 2001 indicated that an interagency agreement had been reached on the legislative requirements for U.S. implementation, including provisions to grant EPA the ability to phaseout additional POPs beyond the dirty dozen. Regrettably, the proposal revealed by the administration last month has left out this critical piece of implementing authority.

Beginning late last year, press reports indicated that the administration was heading down this path. Attached to my testimony you will find letters sent by PSR and other public interest organizations to CEQ, OMB, and EPA, expressing our concerns. You will also find a fact sheet prepared by PSR along with the World Wildlife Fund, Oceana, and the U.S. Public Interest Research Groups. This document spells out in detail the issues raised by the omission of provisions related to new POPs. As it makes clear, such an omission would tie EPA's hands and put up an unnecessary hurdle to domestic regulation of any POP added to the treaty. The failure to amend TSCA and FIFRA *now* to allow EPA to regulate new POPs in the future would amount to a failure to implement Article 8 of the convention. It would result in an absurd situation in which each amendment to add a POP, which has been agreed by the U.S. as a member of the COP, and subjected to Senate review under the "opt-in" procedure, would still require both houses of Congress to amend TSCA and FIFRA again. Given that these environmental laws have rarely if ever been amended in nearly 30 years, such a process requiring repeated amendment seems both unmanageable, undesirable, and politically unrealistic.

S. 2118 acknowledges this defect. This bill would legislate a domestic process that would parallel the international decision process from beginning to end. While the POPROC is evaluating a nominated chemical, the EPA Administrator would be directed by statute to initiate a notice and comment process to gather information about the uses and sources of the nominated chemical domestically, to inform a future decision about policy actions that might be needed to ban or regulate it. In the

[8] Weisglas-Kuperus N. et al. 2000. Immunological effects of background exposure to polychlorinated biphenyls and dioxins in Dutch preschool children. Environmental Health Perspectives 108(12):1203–1207.

end, if the COP decides to list that new POP by amendment, S. 2118 would give a "rebuttable presumption" to the COP's decision. In essence, the legislation would automatically deem any POP added by the COP to present an unreasonable risk of injury to health or the environment, and would thus authorize EPA to undertake a rulemaking to control the production, use, and trade in that new POP.

Administration officials have argued that additional authority is not required for EPA to take domestic action against any future POP. However, a careful reading of TSCA and FIFRA calls this claim into question. As written, these statutes would not allow EPA to prohibit the manufacture for export of any future POP. Experience even with the dirty dozen has shown this—chlordane and heptachlor, for example, were manufactured and exported for years after all uses were canceled domestically. In light of our experience with these laws, PSR does not believe that they can be used to effectively and efficiently eliminate future POPs without amendment now.

THE U.S. SHOULD BE A PROACTIVE PARTICIPANT IN THE STOCKHOLM CONVENTION

The U.S. has long been at the forefront of global efforts to protect the environment and public health. This country led the world, for example, in phasing out the use of DDT and leaded gasoline. In implementing the Stockholm Convention, the U.S. must continue to play a leadership role. S. 2118 will facilitate U.S. leadership in meeting the obligations of the Stockholm Convention in several important ways. For example, the legislation would require EPA to contract with the National Academy of Sciences (NAS) to undertake a major POPs study. This comprehensive research program outline in the bill is designed to screen chemicals using the Stockholm Convention's POPs criteria, identify priority POPs for possible nomination to the POPROC, and develop a monitoring strategy for persistent and bioaccumulative substances. This NAS study, along with the related requirement that EPA develop and submit to Congress a comprehensive strategy to reduce the public's exposure to persistent, bioaccumulative toxic substances, will enable the U.S. to be a proactive participant to the Stockholm Convention. Indeed, it will position the United States to lead the world in utilizing a science-based process to identify and take action against future POPs, rather than merely reacting to international pressure.

Finally, S. 2118 would require EPA to submit to Congress, within 90 days of its enactment, the agency's final dioxin reassessment. This document has been in development for more than 10 years, and represents the state-of-the-science on dioxin and related POPs. Many organizations and agencies—including the EPA itself—have been waiting for its release to guide policy actions to phaseout this most toxic of POPs. The long-awaited release of this document will serve as a jumping off point for the U.S. to meet its long-term obligation of dioxin elimination under the Stockholm Convention.

CONCLUSION

The announcement by President Bush of his intention to sign and ratify the Stockholm Convention more than a year ago received unprecedented support from the public interest community, the chemical industry, and Members of Congress on both sides of the aisle. This important treaty continues to offer a rare opportunity to achieve consensus in the environmental policy arena.

The ratification and full implementation of the Stockholm Convention is of utmost importance to PSR. In addition, numerous groups and constituencies not represented here today—including environmental, public health, consumer, and indigenous organizations across the country—share our hope that the treaty can be rapidly ratified and fully implemented, and can be claimed as a victory by all. It is now up to this committee and the Congress as a whole to strive for such an outcome. We look forward to working with you to reach it.

Thank you for your attention, and I will be pleased to answer any questions you may have.

U.S. Ratification of POPs Treaty in Danger

White House Seeking Only

Partial Implementation of Stockholm Convention

On April 11, 2002, the White House asked the Senate to ratify the Stockholm Convention on Persistent Organic Pollutants (POPs). *Regrettably, the Administra-*

tion's implementing legislation fails to ask Congress for the legislative provisions necessary to fully implement the treaty.

This unprecedented international agreement targets chemicals that are detrimental to human health and the environment globally, starting with a list of 12 POPs that includes formerly used pesticides, dioxin, and PCBs. In addition to governing the phaseout of the initial list of POPs, the Stockholm Convention mandates a process for nomination, science-based assessment, and addition of other POPs to the treaty. In a Rose Garden ceremony last spring, President Bush announced his support for the agreement, noting that while it was negotiated by the previous administration, it "achieves a goal shared by this administration" and "shows the possibilities for cooperation among all parties to our environmental debates."

Some changes to domestic environmental laws, including TSCA and FIFRA, are needed to give EPA the power to eliminate the initial 12 POPs. In addition, a process for regulating new POPs must be reflected in implementing legislation, unless the treaty provisions related to adding POPs were considered to be self-executing. Last summer, EPA crafted a proposal to deal with both categories of legislative changes at the time of ratification. *Now, the Administration is instead asking Congress to amend TSCA and FIFRA to address only the initial 12 POPs, without making the statutory changes needed to regulate chemicals subsequently added to the Convention.*

FAILURE TO AMEND U.S. LAWS NOW TO PROVIDE FOR THE ADDITION OF NEW POPS WOULD VIOLATE THE SPIRIT OF THE STOCKHOLM CONVENTION AND HOBBLE FUTURE U.S. IMPLEMENTATION

The international community envisioned a dynamic instrument that could take into account emerging scientific knowledge about chemicals beyond the initial 12. The Convention as negotiated provides the U.S. with a great deal of flexibility in deciding whether and how to take domestic action against future POPs. Requiring a case-by-case revision of domestic legislation in the future is unnecessary and risks politicizing decisions that would otherwise be based on sound science.

• *The international selection process involves input from all countries that are Parties to the Convention:* Article 8 of the Convention provides for the evaluation and addition of chemicals beyond the initial 12. Upon entry into force, the Conference of the Parties (COP) will establish a Persistent Organic Pollutants Review Committee (POPROC). Parties will submit chemical nominations to the POPROC, which will evaluate them based on agreed scientific criteria including persistence, bioaccumulation, long-range transport, and toxicity. The POPROC must prepare a draft risk profile in accordance with Annex E, to be made available for input from all Parties and observers. The POPROC will then make recommendations that must be approved by the entire COP before a nominated chemical can be added to the treaty as a binding amendment.

• *The Convention does not automatically obligate the U.S. to eliminate each new POP that is added internationally:* Under Article 22(3) of the Convention, COP-agreed amendments to add new chemicals become binding upon all Parties, subject to the opportunity to "opt out" of such obligations within 1 year. However, there exists another safeguard under Article 25(4), which was proposed by the U.S., allowing a Party to declare when ratifying the Convention that it will be bound by new chemical amendments only if it affirmatively "opts in" via a separate, subsequent ratification process. The State Department has indicated that the U.S. will take advantage of the "opt in" provision, enabling the Senate to give its advice and consent to the addition of each new POP in the future.

• *Broad options exist for regulating additional POPs under U.S. law:* Two major options can be considered for amending the Toxic Substances Control Act (TSCA) and Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) to deal with future POPs under the Convention. The first option would amend these statutes to allow for automatic regulation of new POPs once the U.S. "opts in" to the corresponding treaty amendments. This option is preferred by environmental and public health NGO's, given the other existing safeguards described above. The second option, according to EPA officials, would provide that a "rebuttable presumption" be given to the COP's decision on a new POP, while preserving the right (based on food security, public health, or environmental considerations) to make a persuasive case that modified controls are necessary. As presented to NGO and industry groups in July 2001, the POPs interagency group agreed to include this second option in their draft legislation. OMB later overrode the other agencies, choosing instead to eliminate all legislative reference to future POPs.

Failure by the White House to seek legislative authority to address the addition of new POPs makes little sense, and jeopardizes U.S. participation in the Convention for a number of reasons, including:

• Ratification based on incomplete legislative authority would be viewed by the international community as a bad faith commitment to implementation of a treaty that is popular with governments worldwide.

• Transmittal of an incomplete legislative package significantly increases the likelihood that it will be opened for amendment in the House and Senate, risking "non-surgical" and potentially controversial changes.

• Congress is unlikely to repeatedly re-open domestic laws such as TSCA and FIFRA that have rarely if ever been amended.

• Implementation of the Rotterdam Convention on Prior Informed Consent (PIC)—a chemicals treaty that the Administration plans to "bundle" with POPs for ratification—involves related TSCA/FIFRA amendments, reinforcing the value of transmitting a complete legislative package for both agreements.

The Stockholm Convention offers a rare example of consensus in the environmental policy arena. Since its completion in December 2000, support for U.S. ratification has been expressed by the public interest community, the chemical industry, Members of Congress on both sides of the aisle, and the Bush administration, including explicit endorsement of the treaty by President Bush. The President's decision to sign and ratify it was acclaimed as an environmental victory for his Administration. It will now be up to Congress to ensure that the treaty can be fully implemented.

To maintain the U.S. commitment to the Stockholm POPs Convention, Congress must:

• Make the statutory changes to TSCA and FIFRA necessary to authorize regulation of chemicals subsequently included in the Convention; and

• Ratify the treaty in full as soon as possible.

PHYSICIANS FOR SOCIAL RESPONSIBILITY, OCEANA, WORLD WILDLIFE FUND,
U.S. PIRG,
December 20, 2001.

Mr. MITCHELL E. DANIELS, JR. Director,
Office of Management and Budget,
Washington, DC.

Mr. JAMES L. CONNAUGHTON, Chair,
Council on Environmental Quality,
Washington, DC.

Dear MR. DANIELS AND MR. CONNAUGHTON: Our environmental and public health organizations write to request that the White House seek ratification of the Stockholm Convention on Persistent Organic Pollutants (POPs), along with the legislative authority to fully implement it, as soon as possible. As you know, the United States and nearly 100 other countries signed the Stockholm Convention last May. This unprecedented international agreement targets the so-called "dirty dozen," 12 POPs which are known to be detrimental to human health and to the environment.

The announcement by President Bush of his intention to sign and ratify this important treaty last spring received unprecedented support from both our organizations and the chemical industry. In formal remarks at the signing ceremony in Sweden, EPA Administrator Christie Whitman stated that the President had personally endorsed the treaty, adding that the Administration intended "to move expeditiously to submit this treaty to the United States Senate, and to send the implementing measures to the Congress." Nearly 7 months later, however, the treaty and its draft implementing legislation have yet to see the light of day on Capitol Hill.

POPs are global contaminants that threaten human health, wildlife, and ecosystems in the United States and around the world. They have been associated with a variety of adverse health effects, including cancers, birth defects, reproductive disorders, and learning and behavioral impairments. Despite more than two decades of progress toward controlling POPs pollution here at home, these chemicals continue to contaminate the U.S., in many cases traveling thousands of miles from other countries to America's shores. Today, POPs are found in our waterways, soils, and food. They accumulate in the bodies of people and wildlife in every region of the country—from Alaska to New York and everywhere in between. Those most at risk are children, fetal life, women of childbearing age, and communities who rely on local fish and wildlife as a major part of their diet.

The ability of POPs to travel across the nation, to concentrate in the food chain, and to pose risks to people and wildlife even in remote areas demonstrates that the only way to protect the planet is to phaseout POPs everywhere. Once ratified, the Stockholm Convention will go a long way toward alleviating POPs pollution here and around the world. Moreover, it will do so with a minimum of hardship for the U.S. and its domestic industry. A preliminary assessment by the EPA indicated that few changes to existing Federal laws and regulations will be required.

During the treaty negotiations, the U.S. delegation acknowledged that changes to FIFRA and TSCA would be necessary to enable EPA to ban the manufacture and export of the chemicals named in the treaty and to add new chemicals identified as POPs pursuant to the agreed science-based process of analysis and rulemaking. Shortly after the treaty signing, an Interagency agreement was reached on the legislative requirements for U.S. implementation, including provisions to support the ability to phaseout additional POPs beyond the dirty dozen. The ability, over time, to bring new POPs under the treaty's provisions is integral to its success. It is our strong view that the enabling legislation must provide authority to deal promptly and effectively with this important provision of the agreement.

Last spring, the Stockholm Convention offered a rare example of consensus in the environmental policy arena, with support from the public interest community, the chemical industry, the President, and Members of Congress on both sides of the aisle. We hope that the White House will follow through with its promise to protect the health and well being of the American people from POPs by pursuing ratification of this agreement as quickly as possible, and in a manner that gives EPA the necessary authority to expeditiously carry out all aspects of the agreement.

We look forward to your response and to a status report on the Administration's efforts. If we can be of assistance, please feel free to call Karen Perry at Physicians for Social Responsibility (202–667–4260, x249) or Carolyn Hartmann at Oceana (202–833–3900).

Sincerely,

ROBERT K. MUSIL, PH.D., M.P.H.,
Executive Director and CEO,
Physicians for Social Responsibility.

STEPHEN E. ROADY,
President,
Oceana.

KATHRYN S. FULLER,
President,
World Wildlife Fund.

JEREMIAH BAUMANN,
Environmental Health Department,
U.S. Public Interest Research Group.

PHYSICIANS FOR SOCIAL RESPONSIBILITY, OCEANA, WORLD WILDLIFE FUND, U.S. PIRG, SIERRA CLUB, AMERICAN OCEANS CAMPAIGN, CENTER FOR INTERNATIONAL ENVIRONMENTAL LAW, PESTICIDE ACTION NETWORK NORTH AMERICA, FRIENDS OF THE EARTH, LEAGUE OF CONSERVATION VOTERS, NATIONAL AUDUBON SOCIETY, AMERICAN RIVERS, THE OCEAN CONSERVANCY, EARTH ISLAND INSTITUTE, CIRCUMPOLAR CONSERVATION UNION, INDIGENOUS ENVIRONMENTAL NETWORK, ALASKA COMMUNITY ACTION ON TOXICS, SILICON VALLEY TOXICS COALITION, ATLANTIC STATES LEGAL FOUNDATION INC., DEPARTMENT OF THE PLANET EARTH, PROTECT ALL CHILDREN'S ENVIRONMENT, CANCER ACTION NY, COMMONWEAL, GREENWATCH INC., PENNSYLVANIA ENVIRONMENTAL NETWORK, AIR, MONTANA ENVIRONMENTAL INFORMATION CENTER, ANACOSTIA WATERSHED SOCIETY, NORTHWEST ENVIRONMENTAL ADVOCATES, BLUEWATER NETWORK, CITIZENS FOR A FUTURE NEW HAMPSHIRE, MICHIGAN ENVIRONMENTAL COUNCIL, FRIENDS OF CASCO BAY,
February 14, 2002.

JUDITH E. AYRES, Assistant Administrator for International Affairs,
U.S. Environmental Protection Agency,
Washington, DC.

Dear MS. AYRES: Our environmental and public health organizations write to express our concern that the current Administration might fail to seek authority for EPA to fully implement the Stockholm Convention on Persistent Organic Pollutants

(POPs). *In our view, full implementation requires the ability to take domestic action not only against POPs named initially in the treaty, but also against POPs that may be added in the future.*

Signed by Administrator Whitman and representatives of nearly 100 other countries last May, the Stockholm Convention targets a group of chemicals known to be detrimental to human health and to the environment. While the convention begins with an initial list of 12 POPs, including PCBs, DDT, and dioxin, it is by no means limited to that list. Negotiators from all countries agreed that the treaty should be a dynamic instrument, and set up a Persistent Organic Pollutants Review Committee to recommend additional POPs for international action using a science-based screening and risk profile process. Additional chemicals identified as POPs and agreed by all Parties to the Convention will be added to the treaty by an amendment process, with the U.S. reserving the right to "opt-in" to each amendment via a separate, subsequent ratification process.

During the treaty negotiations, the U.S. delegation acknowledged that changes to the Toxic Substances Control Act (TSCA) and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) would be necessary to enable EPA to ban the manufacture and export of the chemicals named in the treaty, and to regulate new chemicals identified as POPs pursuant to the agreed science-based process once the U.S. opts in. An interagency agreement was reached last summer on the legislative requirements for U.S. implementation, including provisions to grant EPA the ability to phaseout additional POPs beyond the dirty dozen. Since then, we have read with concern several press reports that indicate a reversal by the Office of Management and Budget of this important interagency decision.

We are deeply concerned about the suggestion that the Administration is failing to follow through on its commitment to fully implement the POPs treaty. *The ability, over time, to bring new POPs under the treaty's provisions is integral to its success. It is our strong view that the enabling legislation must provide authority to deal promptly and effectively with this important provision of the agreement.*

The announcement by President Bush of his intention to sign and ratify this important treaty last spring received unprecedented support both from our organizations and the chemical industry. The Stockholm Convention offers a rare example of consensus in the environmental policy arena, with support from the public interest community, the chemical industry, the President, and Members of Congress on both sides of the aisle. We hope that the Administration will keep its promise to protect the health and well being of the American people from POPs by pursuing ratification of this agreement as soon as possible, and in a manner that gives EPA the necessary authority to expeditiously carry out all aspects of the agreement.

We look forward to your response and to a status report on the Administration's efforts. If we can be of assistance, please feel free to call Karen Perry at Physicians for Social Responsibility (202–667–4260, x249).

Sincerely,

Robert K. Musil, Ph.D., M.P.H., Executive Director and CEO, Physicians for Social Responsibility; Stephen E. Roady, President, Oceana; Carl Pope, Executive Director, Sierra Club; Glenn Wiser, Staff Attorney, Center for International Environmental Law; Brooks Yeager, Vice President for Global Threats, World Wildlife Fund; Gene Karpinski, Executive Director, U.S. Public Interest Research Group; Ted Morton, Policy Director, American Oceans Campaign; Kristin S. Schafer, Program Coordinator, Pesticide Action Network North America; Larry Bohlen, Director, Health and Environment Programs, Friends of the Earth; Lois J. Schiffer, Sr. Vice-President for Policy, National Audubon Society; Tim Eichenberg, Program Counsel, The Ocean Conservancy (formerly the America's Waters Center for Marine Conservation); Evelyn M. Hurwich, Executive Director, Circumpolar Conservation Union; Pamela K. Miller, Program Director, Alaska Community Action on Toxics; Samuel H. Sage, President, Atlantic States Legal Foundation, Inc.; E.M.T. O'Nan, Director, Protect All Children's Environment; Sharyle Patton, Co-Director, Sustainable Futures Project, Commonweal; Brian Laverty, President, Pennsylvania Environmental Network; Anne Hedges, Program Director, Montana Environmental Information Center; Nina Bell, J.D., Executive Director, Northwest Environmental Advocates; Carolyn Snyder, President, Citizens for a Future New Hampshire; Mary Minette, Legislative Director, League of Conservation Voters; S. Elizabeth Birnbaum, Director of Government Affairs, American Rivers; Gershon Cohen, Ph.D., Project Director, Campaign to Safeguard, America's Waters, Earth Island Institute; Tom Goldtooth, Director, Indigenous Environmental

Network; Michael Stanley-Jones, Director, Sustainable Water Program, Silicon Valley Toxics Coalition; Erik Jansson, Executive Director, Department of the Planet Earth; Donald L. Hassig, Director, Cancer Action NY; Bill Smedley, Executive Director, GreenWatch Inc.; Vicki Smedley, CEO, AIR (Arrest the Incinerator Remediation); Robert E. Boone, President, Anacostia Watershed Society; Russell Long, Ph.D., Executive Director, Bluewater Network; James Clift, Policy Director, Michigan Environmental Council; Joseph E. Payne, Executive Director/BayKeeper, Friends of Casco Bay.

RESPONSES BY KAREN L. PERRY TO ADDITIONAL QUESTIONS FROM SENATOR SMITH

Question 1. Are a large number of chemicals expected to be added to the POPs Convention?

Response. No. While it is difficult for anyone to say exactly how many substances might eventually be added to the Convention, most experts agree that the list of probable additions is finite and relatively small. The Convention was created to deal with a limited set of chemicals that are highly persistent, very bioaccumulative, toxic, and truly global in nature. The specific numeric criteria—for bioaccumulation factor and half-life in water and soil, for example—were carefully chosen by negotiators to "capture" only those substances that are very similar to the 12 initial POPs.

We can predict some of the most likely candidates in this limited universe of substances. Four chemicals—chlordecone, hexabromobiphenyl, the pesticide lindane, and polyaromatic hydrocarbons—are listed in the LRTAP POPs Protocol but not in the Stockholm Convention, and these are likely candidates for addition. Five more chemicals are now being considered for addition to the LRTAP Protocol as well. In addition, various international bodies (such as the OECD Chemicals Programme and the UNEP/GEF Regionally Based Assessment of Persistent Toxic Substances Project) are evaluating perhaps a dozen or so other chemicals that may meet some or all of the criteria set out in the Stockholm Convention.

Question 2. Regarding future POPs, is there a process that aligns the current standards under TSCA and FIFRA, including the due process given under these U.S. laws, with these international agreements?

Response. TSCA and FIFRA set out similar processes for EPA evaluation of chemicals that pose a threat of harm to human health and the environment. Participation of regulated industry is built into both of these statutes, and in each (but particularly in TSCA), the threshold for determining that a substance poses and unacceptable risk is high. PSR believes that 5.2118 sets out a reasonable mechanism for aligning these determination processes—including multiple opportunities for industry and other interested stakeholders to comment—with the international POPs determination process set out in the Stockholm Convention. Other fomulations for aligning these processes may be possible, but these would need to be examined carefully to ensure that they would allow the United States to efficiently and effectively participate in the international selection and phaseout of additional POPs.

Question 3. Does ratification of the POPs Convention require this implementing legislation to address the addition of new chemicals?

Response. The addition of new chemicals is a cornerstone of the Stockholm Convention. As a Party to the Convention, the United States will be expected to participate fully in the Conference of the Parties, which will evaluate the recommendations of the Convention's POPs Review Committee and decide whether to list additional POPs. The United States will also be expected to determine expeditiously whether it will opt in or opt out of individual amendments adding POPs. Finally, the United States will be expected to move quickly to implement those amendments and obligations that apply to it. For these reasons, the United States must have legislation in place at the time that it becomes a Party to the Convention, to enable it to fulfill these expectations. As currently written, TSCA and FIFRA do not provide sufficient authority. Thus, it is up to Congress to provide the necessary authority in this implementing legislation.

RESPONSE BY KAREN L. PERRY TO ADDITIONAL QUESTION FROM SENATOR JEFFORDS

Question 1. How much collaboration has occurred between the public interest community regarding POPs, and to what extent are your views concerning the adding mechanism shared by this constituency?

Response. The public interest community both in the United States and internationally has taken an active interest in POPs since the very start of negotiations on the Stockholm Convention, and has been remarkably coordinated in its positions and activities. While of course in an official capacity I can speak only for my own organization, I will say that there is a whole network of organizations across the country that share an interest in domestic implementation of the Stockholm Convention. These include national and DC-based organizations like Physicians for Social Responsibility, the World Wildlife Fund, the U.S. Public Interest Research Groups, Oceana, the Sierra Club, Pesticide Action NetworkNorth America, and the Center for International Environmental Law. They also include a whole host of local and state-based grassroots groups, such as

- Alaska Community Action on Toxics
- Indigenous Environmental Network
- Cancer Action New York
- Citizens for a Future New Hampshire
- Montana Environmental Information Center
- Pennsylvania Environmental Network
- Great Lakes United

These groups and many more joined PSR on a letter to EPA in February (which was attached to my original written testimony), expressing the shared view that domestic POPs legislation must include provisions to address future POPs. In short, it is my sense that the public interest community is united on this issue.

STATEMENT OF JAY J. VROOM, PRESIDENT, CROPLIFE AMERICA

Mr. Chairman and members of the committee, I am Jay Vroom, president of CropLife America. We commend Chairman Jeffords and the entire Committee on Environment and Public Works for providing leadership on this complex issue. I appreciate; the opportunity to testify before you this afternoon on the Persistent Organic Pollutants Implementation Act of 2002 (S. 2118) and the Bush administration's legislative proposal for implementing the Stockholm Convention on POPs and the Long-Range Transboundary Air Pollution (LRTAP) Protocol on POPs, as well as the Rotterdam Convention on the Prior Informed Consent: Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (PIC).

CropLife America supports the POPs and PIC international environmental agreements. The crop protection industry acknowledges its role and responsibility in protecting human health and the environment in the manufacture, distribution and use of pesticides. Our member companies are committed to the spirit and letter of these agreements, and we welcome the opportunity to make recommendations about their integration into U.S. law. We also recognize the importance of including a process in the legislation to address U.S. decisionmaking on pesticides proposed for future inclusion in the international POPs listing.

CropLife America is the national trade association representing the developers, manufacturers, formulators and distributors of plant science solutions for agriculture and pest: management in the United States. Our member companies develop, produce, sell and distribute virtually all the crop protection and biotechnology products used by American farmers. Our mission is to foster the interests of the general public and CropLife member companies by promoting innovation and the environmentally sound discovery, manufacture, distribution and use of crop protection and production technologies for safe, high quality, affordable, abundant food, fiber and other crops.

It may seem obvious, but our industry's products provide many benefits to people and the environment. Our products have an enormous impact on the availability of abundant and affordable food and fiber while also protecting people, animals, and our homes and businesses from disease-carrying pests. Pesticides control outbreaks of crop-damaging fungus, insect infestation and weeds to enhance U.S. food and fiber production. Pesticides are also used to combat damaging and health-threatening pests and insects. Pesticides control and eliminate vector borne illness caused by rats, mosquitoes (West Nile virus and other encephalitis) and ticks (lyme disease), among others. They combat cockroaches and mold/mildew in housing, restrooms, cafeterias and elsewhere, reducing known allergens causing asthma and other disease. Other insects and plant pests, such as bees (which can cause anaphylactic reactions), poison ivy, fire ants and spiders, are controlled effectively by pesticides. We are reinforcing the benefits of our industry's products at every opportunity and recently held a 2-day conference to foster better understanding of the enormous benefits of pesticides.

We believe the United States has the strongest and most emulated pesticide regulatory system ire the world. Congress saw the need for a separate statute regulating pesticides in order to provide for extensive health and safety testing when it passed the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) in 1947. Through subsequent major revisions to FIFRA in 1972, 1975, 1978 and 1988, Congress has provided for an increasingly comprehensive pesticide regulatory system as the basis for EPA pesticide decisions.

For example, under FIFRA's strict provisions the process of bringing pesticides to market by securing an EPA registration is complex and demanding, based on strong scientific principles and undertaken according to stringent government review and regulation. EPA requires up to 120 separate scientific safety tests to ensure that a product, when used properly, does not present health or environmental concerns. On average, only one in 20,000 chemicals makes it from the chemist's laboratory to the farmer's field. Pesticide development, testing and EPA approval takes 8 to 10 years and costs manufacturers $75 million to $100 million for each product.

Given Congress' specific and recurrent decisions on pesticide law over the years, we believe FIFRA provides the necessary statutory framework to implement the conventions without adding pesticide provisions to the Toxic Substances Control Act.

CropLife America supports the sovereign right of individual countries to decide which pesticides they will permit to be used domestically and allow to be brought into their country. Importantly, the POPs and PIC Conventions recognize this and include provisions providing for each nation's right to implement the agreements within their domestic regulatory framework. FIFRA, with its protective health and safety provisions, should be the basis for U.S., pesticide decisions under implementing legislation for POPs and PIC. Specifically, our industry urges that workable implementation legislation recognize the existing risk-benefit standards of FIFRA. The United States may become party to other international agreements, and POPs and PIC implementing legislation may serve as a precedent for the future. Health and environmental protections afforded by FIFRA's stringent scientific standards and U.S. law should be upheld when implementing such agreements.

Our industry is concerned that under S. 2118 an international POPs listing would constitute a domestic, FIFRA finding of "unreasonable adverse effect on the environment." This would trigger U.S. cancellation of a product without full risk assessment, benefits consideration or due process currently provided under FIFRA.

EPA must play an active role in upholding the integrity of the listing criteria and procedures in the POPs and PIC international agreements. We urge that implementing legislation not enable other countries to use these agreements to adversely impact the, availability of U.S. registered pesticide: that meet FIFRA standard's used for agriculture, public health protection and other purposes. The agreements should not become vehicles to impose artificial barriers to trade, impose a competitive disadvantage on U.S. growers or adversely impact public health. 1Ne strongly support FIFRA as the basis for pesticide decisions by the U.S. Government since it provides rigorous protection for human health and the environment.

LRTAP POPS PROTOCOL AND STOCKHOLM POPS CONVENTION

CropLife America actively supported the inter-governmental negotiations that led to the U.S. signing of both the Convention on Long-Range Transboundary Air Pollution on Persistent Organic Pollutants and Stockholm POPs Convention. Our support of both agreements is based on established policies and procedures in the POPs agreements for:

1. Identifying new POPs chemicals within a transparent, science-based, risk/benefit assessment process. Final determination of the POPs status for a pesticide is based on a consideration of socio-economic benefits and risks.

2. Recognizing the sovereignty of each Nation to undertake mitigation requirements for POPs or to "opt-in" or "opt-out" of the international POPs listing based on their domestic risk management conclusions.

3. Contemplating the process for developing national regulatory programs for countries that do not have a regulatory framework in place, while recognizing the sovereignty of existing regulatory programs.

Our industry believes that if a pesticide use is contemplated for international POPS listing, then any alternatives—if they exist—synthetic pesticide or otherwise, should be subject to the same risk-benefit analysis and process to ensure that appropriate alternatives exist.

We agree with the findings of the Conventions regarding POPs pesticides, and recognize that beneficial uses still exist, for example in developing countries, as reflected in the specific exemptions in annexes of both agreements.

Companies represented by CropLife International, our industry's global association, have been working with the United Nations. Food and Agriculture Organization on the safe collection and disposal of obsolete crop protection product stocks in Africa, Asia and Latin America. Through partnering and cost-share arrangements with donor agencies, governments and other stakeholders, this effort hats resulted in the disposal of over 3,000 tons of obsolete pesticide stocks, including 800 tons of POPs pesticides. In 2000 alone, 1200 tons of obsolete pesticides were incinerated in Brazil and approximately 180 tons were successfully retrieved from Gambia, Madagascar, Pakistan and Uganda. Our commitment and work on such disposal projects will continue.

ROTTERDAM CONVENTION ON PRIOR INFORMED CONSENT

CropLife America supports the Rotterdam Convention on Prior Informed Consent. The PIC Convention is first and foremost an information exchange mechanism to assist decisionmaking in developing countries. It makes an important contribution to developing countries' ability to make informed judgments in their national interest. Furthermore, PIC affirms the right of each government to make regulatory decisions that take into account the benefits of product use to agriculture and the public good. We are pleased with the balanced distribution of obligations between importing and Exporting countries. The obligations in PIC are consistent with our industry's product stewardship efforts to ensure the safe use of our products.

Our industry has actively supported the voluntary PIC procedure first established in the late 1980's as part of the FAO Code of Conduct, and we participated as a non-governmental organization in the intergovernmental negotiations that led to the current Convention. We look forward to continuing this tradition of cooperation. We do have several recommendations regarding proposed implementing legislation:

1. In order to provide broad input into EPA decisionmaking, we urge the inclusion of legislative language that directs the Administration to consult with stakeholders and solicit broad stakeholder input. We recommend notice and comment rulemaking as well as an ongoing consultative process.

2. There is no formal mechanism to challenge EPA judgments in applying PIC definitions and criteria to products for which the agency has issued a final regulatory action. We believe any implementation of PIC by the United States should include such a provision, governed under the auspices of FIFRA and the Administrative Procedures Act.

3. Voluntary removal for purely commercial reasons should not by itself constitute a safety risk or reason for PIC listing. For Example, the U.S. market for a particular pesticide may be too small or even non-existent to justify registering the pesticide with EPA. We urge that this provision be explicitly noted in implementation legislation.

OVERALL RECOMMENDATIONS FOR POPS AND PIC IMPLEMENTING LEGISLATION

Our industry looks forward to the opportunity to fully support implementing legislation to accompany the POPs and P1C agreements. We are committed to work with this committee to ensure that these agreements are fully implemented, without unintended consequences, and offer the following recommendations:

General

• We fully support enactment of POPs implementing legislation (S. 2118) consistent: with POPs and PIC international agreements. In our analysis, the proposed POPS legislation could result in U.S.-registered pesticides being removed from domestic use, which is not consistent with our understanding of what is called for in the Conventions. We would welcome the opportunity to work with the committee on clarification.

Safety Standards

• We believe that if a pesticide does not meet FIFRA standards and is not eligible for EPA registration, then the U.S. should be authorized to support its inclusion on the international POPs and PIC lists. Health and environmental protections under FIFRA warrant that pesticides meeting FIFRA safety standards for registration in the U.S. should be ineligible for U.S. support for inclusion on the international POPs or PIC list.

EPA

• We support EPA as the pre-eminent pesticide regulatory agency that recognizes the risks of pesticides and the beneficial role pesticides play in protecting human health and the environment and providing for a safe and abundant food supply. U.S.

decisions on POPS and PIC; pesticides should be based on EPA expertise and regulatory responsibility, with input from other Federal agencies as appropriate.

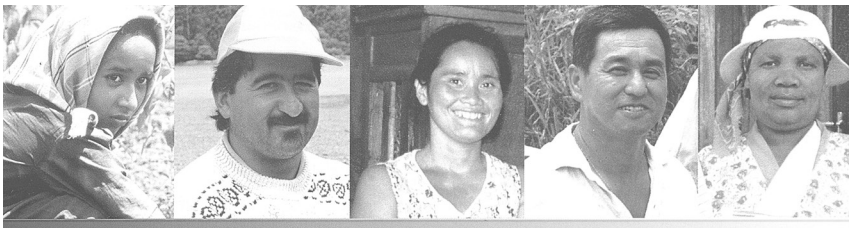
SUMMARY

Our industry is committed to the improvement and building of regulatory capacity, especially in the developing world. We have been active participants in the DECD and NAFTA international forums to harmonize pesticide registration processes for the past 10 years. Most recently our efforts have been focused on harmonization of U.S. and Canadian pesticide regulation.

This hearing is the first to consider a very complex matter. We have been evaluating both legislative proposals and welcome the opportunity to participate in continuing deliberations. We support strong and workable implementing legislation for the Conventions. We understand that PIC legislation will be added and look forward to working with the committee in this effort.

The crop protection industry is committed to a transparent, science-based process for implementing the Conventions and we believe that current statutory framework under FIFRA is ample, with appropriate adjustments, to successfully implement U.S. industry's obligations.

Thank you again for the opportunity to share our views with the committee. We look forward to working with the Chairman and other Senators to ensure that POPs and PIIC are properly implemented to meet the global human health and environmental goals set forth in the three international agreements.



Creating Opportunities for Sustainable Agriculture

CropLife INTERNATIONAL

Representing the Plant Science Industry

Creating opportunities for sustainable agriculture

"Our biggest challenge in this new century is to take an idea that seems abstract – sustainable development – and turn it into a daily reality for all the world's people"
Kofi Annan, UN Secretary-General

From Rio to Johannesburg

Suggesting ways to achieve sustainable development and implementing concrete actions are issues to be addressed at the 2002 World Summit on Sustainable Development.

CropLife International (formerly the Global Crop Protection Federation, GCPF), as a representative of the plant science industry, is aware that sustainable development encompasses economic, social and environmental considerations and that true sustainable agriculture goes beyond the basic production of food and fiber. It encompasses a broad range of vital and diverse cultural roles and responsibilites.

Industry, now recognized as a key stakeholder in the area of sustainable agriculture, has much to offer as a genuine partner of civil society. It is ready to contribute towards the implementation of the Summit's decisions in its field of expertise.

Sustainable development requires a major contribution from agriculture. **Sustainable agriculture** needs to be economically viable, environmentally sound and socially acceptable. Integrated farming is a means of contributing to sustsainable agriculture at the farm level in order to:
- satisfy human food and fiber needs;
- protect and enhance the environment;
- optimize the use of natural resources;
- integrate best use of available technologies;
- maintain the economic viability of farms;
- enhance the quality of life for farmers and society as a whole.

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Introduction

Since the 1992 Earth Summit in Rio de Janeiro, public-private cooperation and multi-stakeholder participation and partnerships have evolved to include all major groups* in search of a common goal: sustainable agriculture. Such cooperation has helped facilitate technology transfer and capacity building, especially to small holders who play a critical role in ensuring food security.

In 2000 the UN Commission on Sustainable Development (CSD-8) called for the continuation of its multi-stakeholder dialogue and asked major groups to **identify** and **develop** relevant case studies that illustrate or support the principles of sustainable agriculture and rural development. CropLife International has responded to this request. This publication presents a number of case studies where industry has assisted or created opportunities to achieve economic growth and more sustainable agriculture.

This CropLife International publication concentrates mainly on case studies implemented at the **small holder** level in **developing countries.** The case studies described have nothing to do with charity. They are approaches taken in order to make markets work. At the end of the day these approaches are only sustainable if they benefit all parties involved.
In the small holder area in developing countries industry only has two choices: to move with the market, or not participate. This publication is about our choice to keep moving with the market.

* major groups – The term used in Agenda 21 to describe nine sectors of civil society fundamental to achieving sustainable development. They are: Women, Children and Youth, Indigenous People, Non-Governmental Organizations, Local Authorities, Workers and Trade Unions, Business and Industry, Scientific and Technological Communities and Farmers.

The broad spectrum of case studies, pilot projects and business approaches highlighted here demonstrate tools, concepts and mechanisms – which appear to work. While the main focus of the publication is clearly centered on the identification of case studies, the **"lessons learned"** section covers both benefits and constraints encountered. The **"looking ahead"** section is one we are committed to developing as we strive to improve our ability to measure the impact of our performance, and expand communication about our progress.

The options described are also intended as a contribution to the debate to help identify and develop the way forward for achieving food security, poverty alleviation and economic development in the future. Hopefully this will inspire others to adopt these practices where appropriate and/or work with us to further develop and improve them. Each contributing company and association has supplied an e-mail contact in this publication for feedback and ideas on how to make such improvements. Please make use of this opportunity.

"Agriculture and technology are complimentary. This publication demonstrates industry's commitment and activities to ensuring that more people have access to today's diverse agricultural technologies. This contributes to food security and helps to reap the benefits of sustainable agriculture."

Charlie Fischer, CEO of Dow AgroSciences and President of CropLife International

The 2000 CSD-8 report on Agriculture reads: "Governments, relevant international organizations and the private sector are urged both to continue and to increase their contribution to capacity-building and transfer of technology, in particular environmentally sound technology, to developing countries and countries with economies in transition, as well as to promote partnerships for fostering sustainable agriculture and food security and promoting rural development."

Capacity building through the transfer of knowledge

Sustainable agriculture requires access to information and sharing of experiences and knowledge. Training is essential at all levels on issues related to product distribution and sustainable use and is best done in partnership with all relevant stakeholders. The industry contributes towards these needs through a variety of avenues as illustrated through the examples presented below.

Training and education are necessary at all levels

The Safe Use Initiative
In line with the objective to promote practices that encourage the safe and efficient use of crop protection products, CropLife International initiated the Safe Use Initiative (SUI) in 1991. The SUI is a comprehensive programme that emphasizes education and training at all levels of involvement with crop protection products in **Guatemala, Kenya** and **Thailand.** Partners include national, community and health authorities, co-operatives, NGOs and international donor organizations. SUI project elements have included all family members, especially women given their role in farming. Retailers have been trained to convey short messages that reinforce safe and efficient use every time crop protection products are purchased.

Local design and manufacturing of protective clothing was particularly encouraged in Kenya because female farmers found traditional designs (trousers) to be uncomfortable. In Thailand, one focus was on improving the environmental performance of local crop protection manufacturers, which are non-CropLife International members. Positive results in these countries have led to the extension of the SUI to over 20 neighboring countries in Africa, Asia and Latin America. For example in **Uganda** training of agricultural workers and plantation management was jointly undertaken with the International Union of Food and Agricultural Workers (IUF).

"Training the Trainers" in IPM
The impact of individual training sessions increases when those trained are trainers themselves. One such project seeks to transfer knowledge on how to organize and provide training in Integrated Pest Management (IPM) in developing countries in the Asian Pacific region. The Asia Pacific Crop Protection Association (APCPA) together with member companies has focused on this approach in **India, Malaysia, Sri Lanka** and other **Asia-Pacific** countries. This project's reach was increased through the translation of the trainers' video into four local languages for further use. Participants from **India** and **Sri Lanka** have since used the IPM training course in their countries, an important step to implementing sustainable farming practices.

"Good Housekeeping" project for dealers and distributors"
To upgrade the standards of warehousing, transport, storage and handling of crop protection products, the Crop Protection Association of the **Philippines** and the Fertilizer and Pesticides Authority (FPA) jointly initiated a "Good Housekeeping" project. It has become a licensing requirement for dealers and distributors, who have realized that improvements in their facilities and good practices will ultimately pay off. Their training is particularly important, as they are a crucial link in the communication chain for the dissemination of information to farmers, who will implement and apply the more sustainable approaches to crop protection management.

Integrated family training
An Integrated Crop Management (ICM) programme that trains all family members demonstrates the role that knowledge transfer through the household can play in capacity building for crop protection. Farmers in the south of **Brazil,** their wives and older children as well as local schoolteachers participated in the training that started in 1995. The teachers in turn passed on their knowledge to younger children.

Children play a mediating role in regions where adults may not be able to read and write. Women often are more receptive to health, safety and environmental information and when all family members are included in training, the opportunities increase to discuss and adopt new behaviors. Bayer organized this community based pilot project together with a variety of partner organizations.

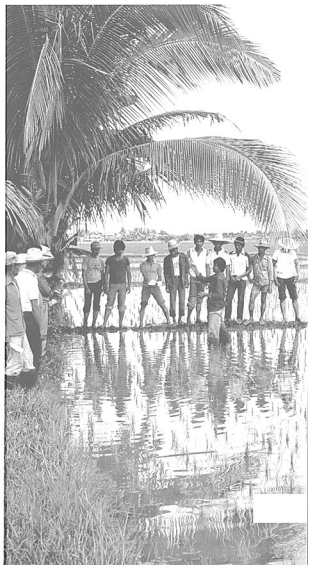
owledge Transfer

It is coordinated by local staff familiar with the region's needs and was based on an analysis of the beneficiaries' needs. The company has subsequently taken similar approaches in **Mexico, Guatemala, Colombia, Argentina** and **Chile.** A follow-up survey in 1998 substantiates that the campaign contributed remarkably to knowledge transfer in the area of ICM and thus to more sustainability in product use.

Agenda 21, Chapter 19 (65)
" ... In all countries basic elements of chemical safety principles should be included in primary education curricula ..."

Cooperating with vocational schools
An educational project aimed at 12–15 year old secondary school pupils seeks to promote responsible agricultural practices and crop protection amongst future farmers. Syngenta, working together with the University of the Philippines (Los Banos and Diliman) and the Department of Education, developed and piloted the project over a six-year period. The programme, called "Solutions" was officially launched in all 130 Vocational Schools throughout the Philippines in September 1999. A teaching pack containing lesson plans and activities based on participatory techniques is used to explore four key topics: soil, water, food and useful plants. Teachers and students' have responded very positively to the programme.
The pilot project report states that the teaching modules enhanced and further developed students' positive attitude towards the environment and agricultural productivity.

University students' training
Formal educational avenues also constitute a means for capacity building. In 1997, officials of the Crop Protection Department of the Ministries of Agriculture and university professors from **Guatemala, El Salvador, Honduras, Costa Rica, Nicaragua, Panama, Dominican Republic, Belize** and **Cuba** were trained at Bayer's agricultural center in Monheim, Germany. This pilot training project led to a public-private partnership to transfer knowledge to university students in the Central and South American region. Training modules targeted at agronomy, biology and medical university students have been developed. They include sustainable agriculture, including Integrated Crop and Pest Management, basic training in toxicology, ecotoxicology and risk assessment. Each year some 1800 people are trained through this programme.



KnowledgeTransfer

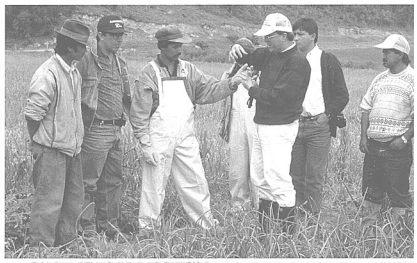
Public-private knowledge transfer
The "*Aventis Fondation*" has set up long-term partnerships with agricultural research institutions such as the French Center for International Cooperation in Agronomic Research for Development (CIRAD). Through this arrangement, a joint research project on an important disease attacking citrus fruit in **Africa**, has been initiated. The disease is currently found in at least 18 African countries and **Yemen.** Local public research institutes support this project. A close South-South cooperation through the creation of an international observation team monitors the mitigation of the disease. The programme emphasizes defining IPM strategies for the local control of the disease and the prevention or limitation of its further spread.

Lessons Learned ...

- Capacity building should be targeted at all levels, from farmers to agricultural workers, dealers and distributors, trainers of trainers, teachers and researchers, agricultural students and school children in a community context.
- Integrated programmes such as family or community-based training can be particularly useful as interest and enthusiasm for the projects' implementation rises. As more players become involved a sense of ownership is engendered. All will feel a part of ensuring sustainable agriculture activities.
- The critical nature of partnerships between industry and other stakeholders was revealed in all training projects and economic benefits are a key tool for those trained to change behaviors.
- The lack of basic education in many developing countries creates a barrier to efforts to promote sustainable agriculture. Governments should assign a high priority to the promotion and improvement of basic education, including literacy and life skills. Industry is aiming to use all methods of communication to get the message across. Indigenous knowledge has to be nurtured if it is to survive.

... and Looking Ahead

- Since 1991, the Global Crop Protection Federation, now CropLife International, has engaged in capacity building through Safe Use Projects in developing countries. Member companies of CropLife International are performing similar activities and the industry is committed to continue its efforts in this area at all levels.
- Building on its experience, CropLife International is taking actions to support three Regional Technology Centers (RTCs) in Asia, Middle East/Africa and Latin America. The RTCs will foster the exchange of information, knowledge, technologies and expertise, while addressing the needs identified by those who will benefit from them. The industry invites all stakeholders such as governments, academic institutions and donor agencies, to join these efforts.



The 2000 CSD-8 report on Agriculture reads: "Governments are urged to promote the safe and sustainable use of plant protection products ... All stakeholders, including farmers, the private sector and international organizations, are encouraged to form effective partnerships with governments, including those that provide capacity building assistance for this purpose."

Technology development and transfer

Member companies of CropLife International have a long-term commitment to developing innovative, science-based solutions which enable sustainable agriculture. These allow farmers to improve yields and ensure safe, high-quality food, feed and fiber at affordable prices.
The industry does not simply focus on the needs of large holders, but also supports small holders. Efforts do not end with the development of a new product. Industry provides services, approaches and technology packages. Their adaptation to local conditions is necessary to realize their maximum benefits. This is taking place across the globe.

Transferring technology through a variety of approaches

Detecting crop viruses in Indonesia – a prerequisite for growing healthy crops
Transferring new means for detecting crop diseases is crucial to growing healthy crops. Efforts to tackle the tomato spotted wilt virus brought **Indonesia's** Central Research Institute for Horticultural Crops together with Syngenta and the Department of Virology at Wageningen Agricultural University, the **Netherlands.** Since the virus is not easily detected using traditional serological techniques, the project provided two new diagnostic techniques and trained Indonesian scientists in their use for identifying the virus. Through this technology transfer, local scientists can adapt the diagnostic test to identify other viral diseases on important crops. Tomato yields in **Southeast Asia** are low due to pests that transmit the virus that is one of the top ten most economically damaging plant viruses, causing worldwide crop losses of more than US$ 1 billion. Identifying the virus makes the family income of farmers more reliable and thus contributes to farmers' livelihood.

Controlling the cotton caterpillar in West Africa
Adapting crop protection products for targeted markets is another example of technology transfer. It helped the West African cotton industry, whose exports rank third in the world, to protect against an important cotton caterpillar.
DuPont developed a new chemical family to combat this pest and focused on transferring this cutting edge technology to West Africa through a partnership approach. Prior to bringing the product to market, a local distributor helped test it in the region for five years. One year of pre-merchandising involved 1600 farmers from **Benin, Burkina Faso, Mali** and **Togo** to verify the efficacy, selectivity and acceptability of the product by the cotton producers before it was actually registered for the purpose. "The result has been a tangible difference in the lives of cotton growers in West Africa" says DuPont Chairman and CEO, Chad Holliday.

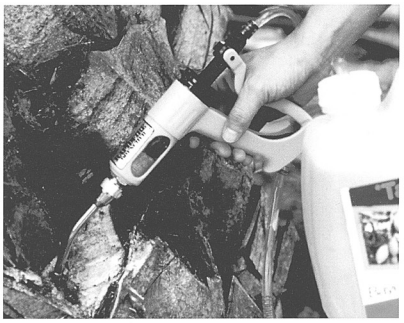
Technology Transfer

Right equipment allows efficient product application

Farmers' technological needs range from crop protection products to application techniques adapted to local conditions. Bayer recognised that emerging farmers in **South Africa,** who on average farm an area of 0.5–2 hectare needed crop protection support to control a corn pest. However many subsistence farmers – most of them are women – did not have application equipment and water for spraying was often scarce. The solution came in the form of a cylindrical container whose average shake dispensed the correct dose of a ready-to-use product. It could be applied directly into the funnel of the corn plant and its package size was adapted to the needs. Another example of the development and transfer process of application techniques involves small holders in **Zimbabwe** and **Zambia** growing cabbage and tomatoes.

They needed an alternative to their tool for applying insecticides: spoons. Bayer recognized that the small scale of these farms meant that cost was a key consideration for any new equipment. A package cap with a fixed dosage delivery system and new, smaller package sizes adapted to small-scale farmers' needs were developed. Accurate and targeted dispensing means farmers will apply these products more safely, more efficiently, more sustainably and also more economically.

Targeted application of crop protection products is key



Package size enhances affordability, safety and correct product application

In **China,** the average farmer's field is approximately .05 mu (one "mu" is equivalent to one-fifteenth of a hectare). Due to this small plot size, farmers face the challenge of buying just the amount of crop protection product needed, as well as establishing proper rates for such a small area. In addition, liquid formulations historically were packaged in glass bottles, a safety hazard due to the fragility of glass in transportation and the potential for broken glass in the field. To address these market needs, Dow AgroSciences introduced a sachet for liquids which contains appropriate amounts for small areas and various target crops. This allows the farmer to buy what is needed and not more, as well as have a safer delivery mechanism. The small sachet size also allows the farmer to apply a more precise amount of a product to the crop, which benefits the farmer and the environment. The sachet for liquids has been quickly accepted as the most convenient package size and has spurred further work with the packaging concept.

Technology Transfer

Genetically improved sweet potatoes for Africa

Gaining access to sophisticated technologies for enhanced crop production is important, especially for "orphan" crops in developing countries that are generally outside the domain of private sector investment.

The U.S. Agency for International Development (USAID) and the Kenya Agricultural Research Institute (KARI) collaborated with Monsanto to introduce sweet potatoes resistant to viral diseases in Africa. The company trained scientists from KARI on the use of various technologies needed to genetically improve sweet potatoes. The project is now managed by the International Service for the Acquisition of Agribiotech Applications (ISAAA) and includes capacity building for African scientists in advanced biotechnology systems, agronomy, regulatory science and business management. It also developed a framework for biosafety review and testing in **Kenya**, now includes a research institute in **South Africa** and efforts are underway to bring scientists from other places in Africa into the project. The sweet potato remains an important food security crop throughout Africa, but viruses can result in the loss of over 80 percent of the crop in some seasons.

Lessons Learned ...

- Farmers will only adopt new technologies if they are given the appropriate incentives, knowledge and practical skills. This builds confidence in the successful outcome of adoption. The success of these cases has come from the establishment of clear economic benefits as motivators for change and the use of "learning by doing" participatory training techniques and local demonstration projects.
- Partnerships at all levels are a key ingredient for the process of adapting existing technologies to local conditions. Such partnerships are particularly critical for small-scale markets where economic imperatives make it difficult for business and industry to participate on their own.
- The enabling environment and coherent national policy and legal frameworks so often called for in UN environmental agreements remain prerequisites for continued technological innovation and its diffusion. When they are not in place, technology development and transfer suffer. An underlying lesson from all of these cases follows from the CSD-8 recommendation that governments "adopt and implement measures that guarantee access to technology and research ... in order to ensure a sustainable use of land and water resources."
- A major constraint, is the magnitude of the number of small holders encountered. The challenge is enormous and therefore it needs an integrated approach from all stakeholders: The expertise of industry, growers, governments and donors is required along with the use of new technologies.
- A major barrier to technology and experience transfer consists for instances in the "translation" of difficulties, not just languages but context and cultures. This needs vast improvements in communication methodologies.

... and Looking Ahead

- The plant science industry is committed to continuous development of improved crop input and output systems that benefit large and small holders alike.
- The large number of small holders that must be reached, however, means that all stakeholders need to become involved in technology and knowledge transfer:
  - extension services in developing countries need to be upgraded to support local farmers more effectively;
  - donor agencies could help facilitate projects to ensure that the appropriate technologies reach small holders;
  - governments need to set appropriate agricultural policy and regulatory frameworks that provide incentives for farmers to adopt more sustainable technologies.

"To ensure that advances in the sector of new agricultural technologies continue, developing country governments must create an environment supportive of a competitive and efficient private sector, including a fair and transparent framework for protection of intellectual property. This framework should balance the rights of the breeders as well as the farmers and reflect the specific needs of the country".

Per Pinstrup-Andersen and Marc J. Cohen, International Food Policy Research Institute (IFPRI)

Poverty alleviation and food security through economic development

The International Food Policy Research Institute's (IFPRI) report entitled "Promoting Sustainable Development in Less-Favored Areas" highlights the growing importance that the 1.8 billion small holders, particularly those in "less favored areas", will play in food security during the coming decades.
The case studies below illustrate ways in which the plant science industry has been involved with small holders and has taken their special characteristics and needs into account. These projects can have a greater proportionate impact than projects on large farms due to the multiplier effect of their contribution to the food security, poverty alleviation and economic development needs of the local communities in which they operate.

Big reasons to focus on small holders

Improving incomes – creating jobs
In **Malaysia** the Terengganu Department of Agriculture identified honey mandarin production as a strategic crop for further economic development. Together with Aventis CropScience and the Growers' Association, it engaged in a joint lead farm project to make the crop more profitable by controlling major pests and diseases through an Integrated Crop Management approach. The project resulted in increased yields and led to considerable local employment opportunities in orchard management, pest management, fruit harvesting, grading and packing, marketing and distribution. Initially 20 farms, each of which had a honey mandarin crop area of about 5–10 hectares, were involved in the project. Now the area has been extended to cover a total of 600 hectares and is expected to expand further.

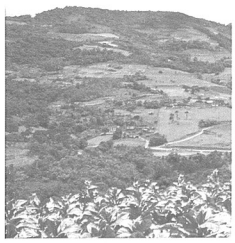
Agenda 21, Chapter 14, 78 (b):
" ... Strengthen regional interdisciplinary projects and establish IPM networks to demonstrate the social, economic and environmental benefits of IPM for food and cash crops in agriculture ... "

IPM expertise supports economic production of fruit
In northeastern **Brazil,** the government initiated a project to encourage the economic development of an area comprising 20,000 hectares through improved agricultural performance. The average farm size in this region is 6 hectares and farmers' main support and training is provided through the local extension service. Bayer was asked to support the government's activities. The company shared its expertise in the area of integrated crop and pest management related to the crops, which are the economic resource of the region: mango, banana, coconut, guava, grape and acerola cherry.

Technology packages for small holders: increasing yields and incomes
The Fundación Mexicana de Desarollo Rural and Monsanto initiated the "Campo Unido" programme in **Mexico** in 1999. It demonstrates the benefits of a holistic approach to meeting the needs of small holders with less than five hectares. Based on a survey of needs, a consortium of partners developed a technology package of goods and services, including hybrid corn seeds, fertilizers, conservation tillage, training and herbicides for 1,300 small holder families and the 1,600 hectares they farmed. An expanded project reached 10 times as many hectares in 2000, with a resulting 50 percent increase of corn yields and 400 percent increase in incomes. The larger corn grain surpluses led to increased incomes for the small holders and greater food security for their families, animals and communities. Less time spent on the farm also allowed farming families to engage in income generating activities such as small-scale trading, production of ceramics and dressmaking.

South Africa: enhanced crop variety for Makhatini
The cotton industry was once the driving force of many economies on the African continent, but is now a shadow of its former self as a result of the bollworm, a serious cotton pest that accounts for up to 80% yield losses. Monsanto developed a resistant variety of cotton which protects the cotton plants against bollworms from within. Small holders in Makhatini, a remote corner of the Kwazulu Natal province in **South Africa,** started using this genetically enhanced variety of cotton in 1998. By 2000, the supplier of the variety reported that on average the cotton grower saved US $ 77.23 per hectare and harvested 384 kilogramms per hectare of fibre over those who grew conventional varieties. Although this enhanced seed is more expensive than

Economic Development

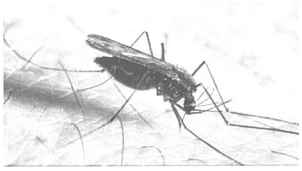


conventional varieties, the protection included means less spent on insecticide and labor input. As a result, the number of farmers using the seeds in the Makhatini area increased after the first growing season from 75 to 410 growers, covering first 798 and then 6,000 hectares. Farmers in **Argentina, Mexico,** the **US, China** and **Australia** are also benefiting from growing this variety.

Health programmes contribute to economic development

Programmes to address vector-borne diseases such as malaria are particularly important for rural areas and can have a large impact in terms of lives saved and medical costs for a community. The Safe Use Initiative, a project of CropLife International, has included an integrated mosquito/malaria component in **Kenya** since 1999. Its goals are to prevent and reduce cases of malaria by introducing environmental hygiene measures, such as draining stagnant water, screening houses and using treated bed nets. A year after the project started, malaria cases had fallen by 50 percent. The benefits for the participating villages included better health and reduced expenditures on medical treatments. Deaths from malaria were also reduced. Neighbouring villages are keen to be included in the programme.

The transmitter of malaria: the Anopheles mosquito



Lessons Learned ...

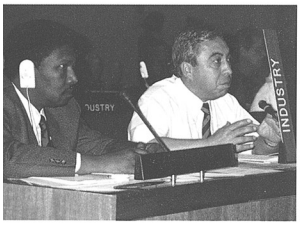
- The case studies provide evidence that rural incomes are determined more and more by a combination of agricultural production, processing and marketing of that produce, and employment of rural people in non-agricultural industrial and service sectors. The promotion of sustainable agriculture and rural development therefore must be an integrated effort encompassing agriculture, industries and the services they demand.
- The basic components required for economic development also further the cause of sustainable agricultural development. These include the creation and maintenance of rural infrastructure, effective markets for agricultural inputs and outputs, agricultural research and extension work oriented towards small farmers, especially women, along with basic education and primary health care.
- The application of suitable agricultural technologies at the community level can improve food security and, if this technology is less labour intensive, it allows farming families to engage in other income generating activities, thus contributing to economic development.
- The science and policy premises for assessing the application of biotechnology in agriculture continue to evolve. To date some countries, their farmers and consumers have already benefited from the new technology, while others await access to and utilization of this new technology. Having in place a coordinated international biotechnology regulatory framework is an important pre-requisite for the adoption of agricultural biotechnology products and will contribute to achieving food security.

... and Looking Ahead

- The plant science industry will continue to further develop optimized crop input and output systems that:
  - play a key role in sustainable economic and rural development;
  - support improving the productivity of existing agricultural land in ways that benefit farmers and society at large;
  - contribute to food security by enhancing the reliability and quality of food production, at affordable prices.
- Industry welcomes exchanges with governments and international organizations to continue to foster the beneficial and timely development of science-based and transparent biotechnology regulatory frameworks that will reflect peoples' legitimate concerns.

Multi-stakeholder processes and partnerships help identify solutions

The Commission on Sustainable Development hosted a two day multi-stakeholder dialogue on Agriculture at its eighth session in April 2000. This dialogue demonstrated that the lines between various major groups (farmers, NGOs, unions and industry) are not as clear as they were in Rio de Janeiro at the UN Conference on the Environment and Development (UNCED) in 1992. Public-private cooperation and multi-stakeholder participation have now evolved to include all major groups in search of a common goal: sustainable agriculture. This cooperation must be strengthened and the plant science industry stands ready to contribute to the process. Clearly areas remain where the multi-stakeholder dialogue has not reached consensus, but nonetheless the dialogues provide an opportunity to learn about each stakeholder's perspective, which can in turn provide a starting point for identifying common ground.



CropLife representatives at the CSD-8 multi-stakeholder dialogue

Many hands make sustainable agriculture work

Successful grassroots approach
SCODP (Sustainable Community-Oriented Agricultural Development Programme) is an NGO based in Western Kenya, since 1997. Its objective is the improvment of the livelihoods and in particular the food security of the poorest small-scale farmers. SCODP, in participation with these farmers, has developed the mini-pack method in which the appropriate seeds and fertilizers, which previously were only available in large unaffordable quantities, are now sold in affordable small packets costing the equivalent of only 5 or 10 US cents. Having increased the growth of their crops, SCODP then turned to Bayer for advice to try to control the many pests affecting maize, sorghum, beans, cowpeas and pigeonpeas. Bayer's small holders development staff trained the NGO in crop protection related issues. Field trials were started in 2000, and are continuing in order to develop solutions for specific pest problems. Crop protection products in small packs and small application devices are now also part of the technology package that farmers can access through SCODP. Given its impact on food security and poverty alleviation, USAID and the Rockefeller Foundation are assisting SCODP to extend its approach to other regions in Kenya.

Multi-stakeholder approach to IPM
In 1999 a multi-stakeholder approach was taken to improve cotton crop and pest management among small holder cotton growers in Andhra Pradesh, **India.** This process was formalized at the first Round Table organized by the National Institute of Agricultural Extension Management in Hyderabad and involved farmers and their spokespersons, representatives of government organizations, NGOs and industry member Syngenta. The collective experience of all participating organizations was pooled to produce an "ideal" blend of appropriate Integrated Pest Management (IPM) techniques. Further work will focus on testing/optimization of these techniques for use by local farmers.

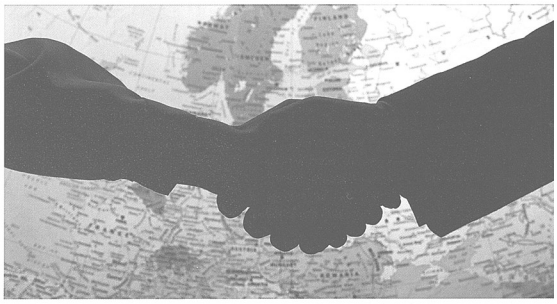
Integrated fruit chain
Based on the collective input from researchers, fruit exporting companies field advisors, plant science industry representatives and farmers, the South

African Fruit Exporting Industry and the local Crop Protection Industry Association (AVCASA) have implemented IPM principles as part of an overall "integrated fruit production system". The application of crop protection products is used in conjunction with biological controll agents and is based on the regular use of monitoring systems designed to establish the levels of pests, diseases and natural enemies in the orchard. These include trapping for pests, leaf counts for mites as well as monitoring weather conditions to establish infection periods of certain diseases. A similar system has now been implemented for wine grapes. The 2000/2001 wine production season is intended to produce the first South African IPM wine. This case study is another example of different players getting together in order to put sustainable agriculture into practice.

Multi-stakeholder

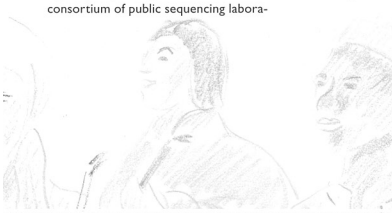
Supporting local adaptation of ICM technique

Multi-stakeholder participatory processes play an important role in helping farmers adopt innovative practices. A related programme launched by the French Center for International Cooperation in Agronomic Research for Development (CIRAD) and the *"Aventis Fondation"* compares transfer methods for Integrated Crop Management in three countries and three different crops: cotton in **Benin,** plantain in **Cameroon** and coffee in the **Dominican Republic.** The programme's strength comes from encouraging farmers' active involvement in developing and adapting ICM techniques in a participatory manner rather than in offering ready-made solutions. Rural families were first surveyed to identify the economic factors affecting them and their farming practices. The farming communities have since developed training material for use in rural training centers.



Making the rice genome accessible for public research

In recognition of the benefits that accrue from collaborative work by stakeholders at the research level, Monsanto released its draft rice genome sequence data to the International Rice Genome Sequencing Project (IRGSP), an 11 member consortium of public sequencing laboratories dedicated to producing a sequence of rice genome. The IRGSP expects to reach its goal more quickly and at less public cost thanks to this data sharing. Monsanto is also making the draft sequence data available at no cost to registered public researchers through the web site www.rice-research.org. This action ensures that scientists worldwide are able to explore many more solutions to food production, health and environmental challenges in rice and other related crops than would be the case if the information were not shared. This is particularly important since rice feeds more people in the world than any other crop.



Enabling biotechnology for African agriculture

New technologies and approaches require sharing of views at a very early stage. This was done at a meeting, that gathered partners of the "Strategic Alliance for Biotechnology Research in African Development" (SABRAD). Stakeholders involved in the dialogue included the American 1890 Land Grant Universities, the U.S. Department of Agriculture, the Consultative Group on International Agricultural Research (CGIAR) with its International Maize and Wheat Improvement Center (CIMMYT), the International Institute for Tropical Agriculture (IITA) and the African Research and Higher Education Institutions. The American Crop Protection Association (ACPA), the Biotechnology Industry Organization (BIO) and other public and private partners supported this initiative. The Alliance seeks to create an enabling environment for agricultural biotechnology that benefits small-scale farmers and enhances food security, environmental quality and trade in **Africa.** Its specific goals, objectives, priorities and initial action plans were developed on a regional basis within the eastern, southern and western/central African regions. Commonalties between regional plans were synthesized into overarching goals and objectives for SABRAD. The common goals include networking, regulatory framework and trade policy, research and development, awareness raising and socio-economic analysis.

Multistakeholder

Partnership in waste disposal
In **Australia** "*drumMUSTER*" is a programme to collect and disposes of packaging waste. It also introduces new formulations/packaging delivery systems that reduce waste at the source. Partnership between farmers, the industry and local governments has made this programme a success. It was developed by Avcare, Australia's National Association for Crop Production and Animal Health, in collaboration with the National Farmers Federation, the Veterinary Manufacturers and Distributors Association and the Australian Local Government Association. The stakeholders are bound by a 3-year agreement (1999–2002) that the Australian Federal Government has endorsed. The programme so far has collected more than one million containers nationally, representing 1,676 tons of non-returnable packaging. Industry is close to a 27 percent reduction of waste at the source. A further impact has been the creation of new recycling opportunities with plastic waste, offering employment. This case study shows how a range of different partners can come together to produce short-term results.

Agenda 21, Chapter 20, 11 (a):
" ... to reduce the generation of hazardous waste, to the extent feasible, as part of an integrated cleaner production approach ... "

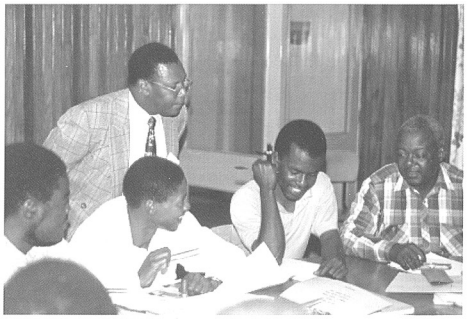
Lessons Learned ...

- Improving the sustainability of agricultural production systems requires the involvement and commitment of all stakeholders. Partnerships have demonstrated the promise for identifying and implementing solutions to promote such systems.
- *Farmers* are closest to the ground and offer a critical perspective on their lands, crops and needs. *NGOs* can provide an intermediary voice between different stakeholders. *Governments* supply extension services to help farmers and set regulations. *Industry* contributes with its technical expertise and its knowledge base about agricultural needs. *Donor agencies* and *international organizations* can play a role in getting parties together to commence multi-stakeholder projects.
No one group holds all the necessary information and no one group carries out all the labor.
- Each innovation and technology adaptation requires an open exchange of views and needs between the relevant actors. An understanding of the new directions and impact that current research can have on the future of agriculture requires such a dialogue. Still opportunities for such exchanges are not always taken and stakeholders are not always ready to work together.
- Duplication of work can be avoided through active exchange of project management skills and experiences from one country to another. For this to be successful however, "translation" difficulties – not just languages but contexts and cultures have to be addressed and new communication technologies should be used to get the message accross.

... and Looking Ahead

- The plant science industry is committed to maintaining open lines of communication and seeks multi-stakeholder partnerships, including public-private ones, to jointly find solutions for sustainable agriculture and rural development.

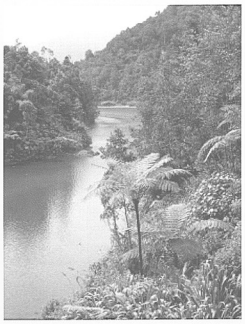
"The issues are so great and the time is running out. We cannot afford not working together".
Arne Fjortoft, WorldView International Foundation



Protecting and enhancing the environment

Environmentally sound productivity increase supported

Since agricultural land is finite, the ever-growing world population – which is expected to double by 2100 – requires improved agricultural productivity per unit area to meet its needs for food and fiber. Crop protection products and enhanced crop varieties, developed by the plant science industry, help farmers to achieve this objective. These tools are critical to prevent new land from being cultivated and to avoid the accompanying loss of wildlife habitat.



Environmentally sound R & D undertaken

CropLife International member companies are working to improve crop qualities, such as yield and drought tolerance, through modern techniques, including biotechnology. Research and development (R&D) aims at inventing more target-specific chemicals, which breakdown readily in the environment. New product dose rates today are more often measured in grams rather than kilograms per hectare. All this enables farmers to increasingly make use of environmentally sound farming techniques.

New crop protection products require up to ten years of research and development before they are placed on the market. To reach the market, they must be exhaustively tested in the laboratory and field to ensure that they do not unacceptably impact non-targeted species, soil, water or air, while still accomplishing their intended task. A new crop protection product costs up to US$ 150 million in human and environmental safety studies to gain regulatory approval. Failing any of the hundreds of tests may mean the whole project is abandoned. To maintain the incentive to spend the R&D money required for continuing with technical advances, it is imperative that the intellectual property of the investment is protected.

Environmentally sound management promoted

CropLife International member companies are committed to sustainable agriculture. They encourage the implementation of sustainable farming systems such as Integrated Crop Management (ICM), which combines care for a diverse and healthy environment with the economic demands placed on agriculture.

The companies have taken an approach that fosters "life-cycle" stewardship of its technologies to protect both the population and the environment. Stewardship starts during the development phase of crop protection products and includes manufacturing, warehousing and marketing. At the growers' level, operator safety aspects as well as the management of integrated farming techniques are addressed. Stewardship programmes continue to manage empty containers and waste. They provide technology packages and services to address farmers' needs. This approach does more than simply sell products – it also ensures that products are supplied along with proper support adapted to local situations.

Integrated Pest Management (IPM) is an integral part of ICM. Its techniques include indirect measures of weed, pest and disease prevention such as crop rotation and monitoring pest populations against threshold levels. Direct control measures through biological, biotechnological, chemical and mechanical means are, however, equally needed. The use of crop protection products is defined by targeted and optimized use, adapted to local environmental and economic conditions.

Protecting and Enhancing

Pan-European network for integrated farming
The European Crop Protection Association (ECPA) encouraged the creation of organizations that promote an integrated farming approach in **Sweden, Luxembourg,** the **United Kingdom, Italy, Germany** and **France.** Model farms in these countries use integrated techniques to demonstrate that their practices are sustainable and profitable. Company specialists in European subsidiaries have participated in this process, which has led to the development of a pan-European integrated farming network. It has served as a model for other regions, where the knowledge and technology transfer approach has been adapted to suit local needs. For example, in the **Asia-Pacific** region a distance learning programme has been established, with the support of industry, to build the skill-base on integrated farming amongst agricultural professionals from all stakeholder groups. Proliferation of modern communication technologies offers ever-greater promise as a tool for expanding this skill-base even to remote rural areas.

IPM for adoption by small holders
In 1997, Syngenta launched a pilot programme in Andhra Pradesh, **India** aimed at improving standards of crop and pest management among small holder cotton growers through the adoption and adaptation of locally developed IPM techniques. The pilot project resulted in targeted use of crop protection products, leading to 30 percent fewer applications and up to 22 percent reduction of crop protection costs. While crop yields held steady or rose, the net profits increased by 36–63 percent.

Agenda 21, Chapter 14, 75 (b):
" ... to improve and implement programmes to put integrated pest management practices within the reach of farmers through farmers network, extension services, and research institutions ..."

Conservation tillage enabled by herbicides help prevent soil erosion and water loss.
One of the major global environmental threats is soil erosion, which degrades the agricultural productivity of the land. With a technique known as conservation tillage, seeds are sown directly into the previous crop's stubble. No intermediate tillage takes place, and thus the upper soil layer is preserved. Wind and water erosion, as well as loss of ground moisture, can be greatly reduced, as compared to mechanical weed control through ploughing. Other benefits include improved levels of soil organic matter, enhanced soil aeration, preservation of soil structure and soil fauna as well as reduced fuel/labor requirements. Conservation tillage is enabled by herbicides and has reduced erosion by up to 95 percent.
A farmer in Pennsylvania, **USA** reports that he has used this combination on his

sloping fields for more than 15 years. He finds that organic matter in his soil is up from 2.7 to 4.3 percent, with some fields reaching 6 percent. This increase of over 50 percent in organic matter is not atypical. It contributes to a continuous improvement in soil fertility. Conservation tillage is one of the many techniques used in integrated farming systems, which are quickly spreading to all parts of the world and are used on both small and large farms. All CropLife International member companies are supplying technologies in support of conservation tillage.

Protecting habitats for wildlife
Syngenta along with the Escuela De Agricultura De La Region (EARTH), Dole Food Company and Del Monte examined the impact of different management practices on the sustainability of wildlife populations in banana plantations in **Costa Rica.** The study confirmed that rich and complex populations of invertebrates exist within banana plantations and appear to be unaffected by even relatively heavy patterns of crop protection product use. Furthermore, many species of rainforest birds were found to live and breed successfully in the forest margins and forest fragments adjacent to banana plantations. The study also suggested that better planning and management of the agricultural landscape through planting trees and shrubs along rivers and drainage canals to protect and connect these forest fragments can help to support bird populations and further increase biodiversity. This approach supports one of the basic principles of integrated farming systems: keep some habitat for wildlife on the farm.

Environment

Environmentally responsible container management

Industry stewardship programmes, such as empty container management, also illustrate the importance of, and the plant science industry's commitment to, promoting environmentally responsible product management. Several recycling models, including **Canada's** *"Stewardship-First"* programme, the recycling efforts of which (fence posts, guardrails, energy) reach a 65% recovery rate, have been adapted to other countries' local conditions. Barry Anderson, a farmer working on the Canadian project says: "Grower safety today, has come a long piece from when I started in the '60s. It is now something that we're doing for our own safety, for the environmental safety of our grand kids ... just all of those things. It's actually a good feeling."

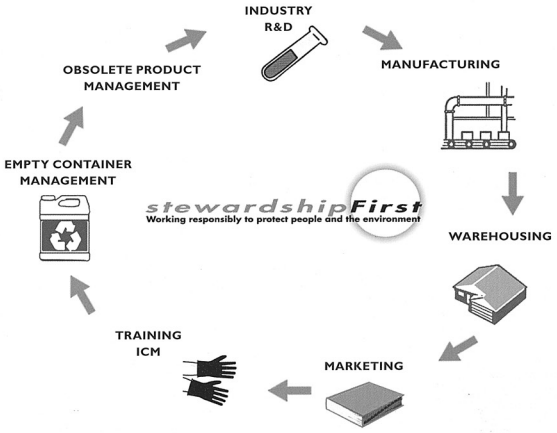
The Latin American Crop Protection Association (LACPA), for example, has organized recycling programmes in **Argentina, Brazil, Colombia, Dominican Republic, El Salvador, Guatemala** and **Mexico.** Programmes first focus on educating farmers about TRIPLE rinsing requirements, that form the basis for any further recycling. Up to 20% of plastic containers used in these countries have been collected. Each programme expects growth in the percentage of recycled containers now that farmers understand the economic benefits to them and the procedures involved.

Agenda 21, Chapter 2. 11 (f):
" ... Facilitation of the establishment of cost effective policies and approaches to hazardous waste prevention and management, taking into consideration the state of development of each country ... "

Collection of empty crop protection product containers in Latin America and the sign highlighting the need for TRIPLE rinsing

Partnerships are key for the disposal and prevention of obsolete stocks

Industry's collaboration with donor agencies from countries like **Denmark, Germany,** the **Netherlands, Switzerland** and the **US** has achieved safe disposal of government owned obsolete crop protection products from a number of developing countries. In order to hasten the disposal of its member companies' products, which account for a proportion of these stocks, members of CropLife are committed to providing assistance. A coordinating industry team – in place since 1995 – has successfully worked with donors, concerned governments and other stakeholders to facilitate industry's input. To prevent the build-up of such stocks in the future, demand-driven procurement of crop protection products is essential. As long as many countries continue the transition from centrally planned purchasing to market-driven conditions, the commitment of governments and donor organizations to addressing the issue remains crucial.



Environment

"George Bernard Shaw said that the only thing we learn from experience is that we do not learn anything from experience. He was a playwright, not a scientist. We have learned much from experience. I believe we can learn even more, and move on to prove that George Bernard Shaw was wrong."
Gro Harlem Brundtland, WHO Director General

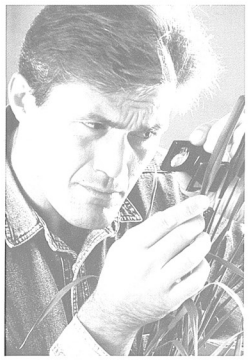
"... to meet the needs of the present without sacrificing the ability of future generations to meet theirs ..."

Lessons Learned...

- Modern agricultural techniques contribute to environmental protection through improved productivity of agricultural land, thus sparing new land from the plough. The key lies in applying the techniques appropriately and managing natural resources properly.
- The adaptation of integrated approaches and concepts to local circumstances is critical. Above all, an incremental integrated approach, respecting farmer's participation in the process, is fundamental to its success. Regulatory frameworks should be structured flexibly enough to allow these developments to happen.
- Private sector funding is imperative if agricultural research is to continue. Such investment requires internationally recognized legal and institutional frameworks conducive to allowing industry to participate in these activities. Ensuring the protection of intellectual property for research and development investments will greatly enhance the incentive for companies to spend the money required to make the necessary technical advances.

... and Looking Ahead

- The plant science industry fosters a "life-cycle" stewardship approach. It ensures that products are supplied along with proper support adapted to local situations – from development to disposal. CropLife International will continue to improve its work in this area and is committed to encouraging its members to measure and communicate their performance as well.
- The plant science industry encourages regulatory frameworks that use science-based decision-making to create the sustainable business environment necessary for new technologies and integrated approaches to emerge, which support environmentally sound farming.
- In 1997 all CropLife International (then GCPF) member associations and companies signed the industry's IPM Declaration that encourages the adoption and implementation of IPM practices by all its members worldwide. The industry remains committed to working actively to support practical implementation of this Declaration and to measure and communicate progress made.
- CropLife International will continue to contribute its expertise and support for the disposal of stocks of obsolete products, originating from its member companies. Furthermore, the active participation of others in bringing about the changes necessary to prevent the re-occurrence of this problem will be sought.
- In all its endeavours the plant science industry welcomes exchanges with governments and other stakeholders in the search for the timely definition of common interests and the identification of the most appropriate techniques and approaches.



CropLife INTERNATIONAL

Representing the Plant Science Industry

CropLife International represents 6 regional and 75 national associations of the plant science industry. It is led by companies such as Aventis CropScience, BASF, Bayer, Dow AgroSciences, DuPont, FMC, Monsanto, Sumitomo and Syngenta.

The plant science industry develops crop protection products as well as agricultural biotechnology products that help make crop production safe and sustainable. Through collaboration with a range of stakeholders, CropLife International initiates stewardship programmes that work hand in hand to foster a start to finish approach to the sustainable use of agriculture products that are environmentally sound, economically viable and socially acceptable.

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www.croplife.org

This publication and further information on some of the case studies can be found on the CropLife International website.

CropLife International takes part in the International Agri-Food Network (IAFN): www.agrifood.net.

A list of national associations is available from these CropLife International regional association members:

American Crop Protection Association (ACPA)
1156 Fifteenth Street NW, Suite 400
Washington, DC 20005
USA
Tel: +1 202 296 1585
Fax: +1 202 463 0474
www.acpa.org

Africa/Middle East Working Group (AMEWG)
PO Box 961810
Sport City 11196
Amman, Jordan
Tel: +962 6 582 9990
Fax: +962 6 582 9990
E-mail: ali.amewg@firstnet.com.jo

Asia-Pacific Crop Protection Association (APCPA)
28th Floor, Rasa Tower Building
555 Pahonyothin Road
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Bangkok 10900
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Tel: +692 937 0487/88/89/90
Fax: +662 937 0491
www.apcpa.org

European Crop Protection Association (ECPA)
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Tel: +32 2 663 1550
Fax: +32 2 663 1560
www.ecpa.be

Japan Crop Protection Association (JCPA)
Nihonbashi Club Building
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Nihonbashi Muromachi
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Latin America Crop Protection Association (LACPA)
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STATE OF ALASKA, OFFICE OF THE GOVERNOR,
Juneau, Alaska, May 7, 2002.

Hon. JAMES M. JEFFORDS, Chairman,
Environment and Public Works Committee,

Hon. ROBERT C. SMITH, Ranking Member,
Environment and Public Works Committee,

Hon. BARBARA BOXER, Chairman,
Subcommittee Superfund, Waste Control and Risk Assessment,
Environment and Public Works Committee,
Washington, DC.

DEAR SENATOR JEFFORDS, SENATOR SMITH, AND SENATOR BOXER: The State of Alaska supports the U.S. Senate's advice and consent to ratification of the Stockholm Convention On Persistent Organic Pollutants (POPs) and the appropriate implementing legislation.

This treaty is of the utmost importance to the health and well-being of Alaskans. Although Alaska's environment is among the most pristine in the world, we are now discovering low levels of persistent organic pollutants such as pesticide Polychlorinated biphenyls (PCBs) and dioxins, in Alaska's Arctic. These chemicals are not produced in Alaska but are transported here by water and air currents from the developing world where they are still manufactured and used.

The treaty has special significance to Alaska Natives who have voiced increasing concern about whether POPs pose a threat to their subsistence foods. As you know, these contaminants have a tendency to accumulate in the fatty tissues and organs that are an enormous part of the subsistence diet and cultural traditions of many Native peoples of the Arctic.

I am very supportive of the approach to bundle the Stockholm Convention with the very important Convention on Long-Range Transboundary Air Pollution (LRTAP) and the Rotterdam Convention on the Prior Informed Consent Procedure (PIC). In addition, the State of Alaska supports provisions for including new additions to the POPs list. Without such a provision, the inclusion of a new chemical will entail a lengthy administrative and legislative process. The last process took over 4 years; I believe that the process to list new chemicals should be considerably quicker. I encourage this committee to recommend legislation that implements the Stockholm Convention and also includes a critical mechanism to address future harmful pesticides and chemicals not currently listed.

As you know, the Bush administration chose not to include such provisions in its proposed legislation. It is my understanding that the administration felt these provisions were too complex and as Administrator Whitman stated, they might "hold up" the implementing legislation. I understand that the administration wants to pass this legislation in an expeditious manner. However, I believe the U.S. Senate can do better by reinserting language that will allow for chemicals not listed in the convention, and any that might be produced in the future, to be added administratively to the treaty. In this way, we can ensure the highest level of protection for not only the Arctic and the Native peoples dependent on its resources, but all the people of our planet.

Thank you for your consideration of this very important matter. I ask that my comments be entered into the record of the May 9, 2002 hearing on S. 2118.

Sincerely,

TONY KNOWLES,
Governor.

OCEANA,
Juneau, Alaska, May 10, 2002.

Senate Committee on Environment and Public Works,
Washington, DC.

DEAR COMMITTEE MEMBERS: Tiffany Prather, staff to the Senate Committee on Environment and Public Works contacted me regarding your hearing on Persistant Organic Pollutants and related legislation. I am submitting the attached document, "Contaminants in Alaska", pertaining to contaminants and Persistant Organic Pollutants in the Arctic.

This document reflects the importance of this matter regarding the health of our great nation's oceans and watersheds in the Arctic. Further this illustrates the threat that Persistant Organic Pollutants have to Alaskans, in particularly and

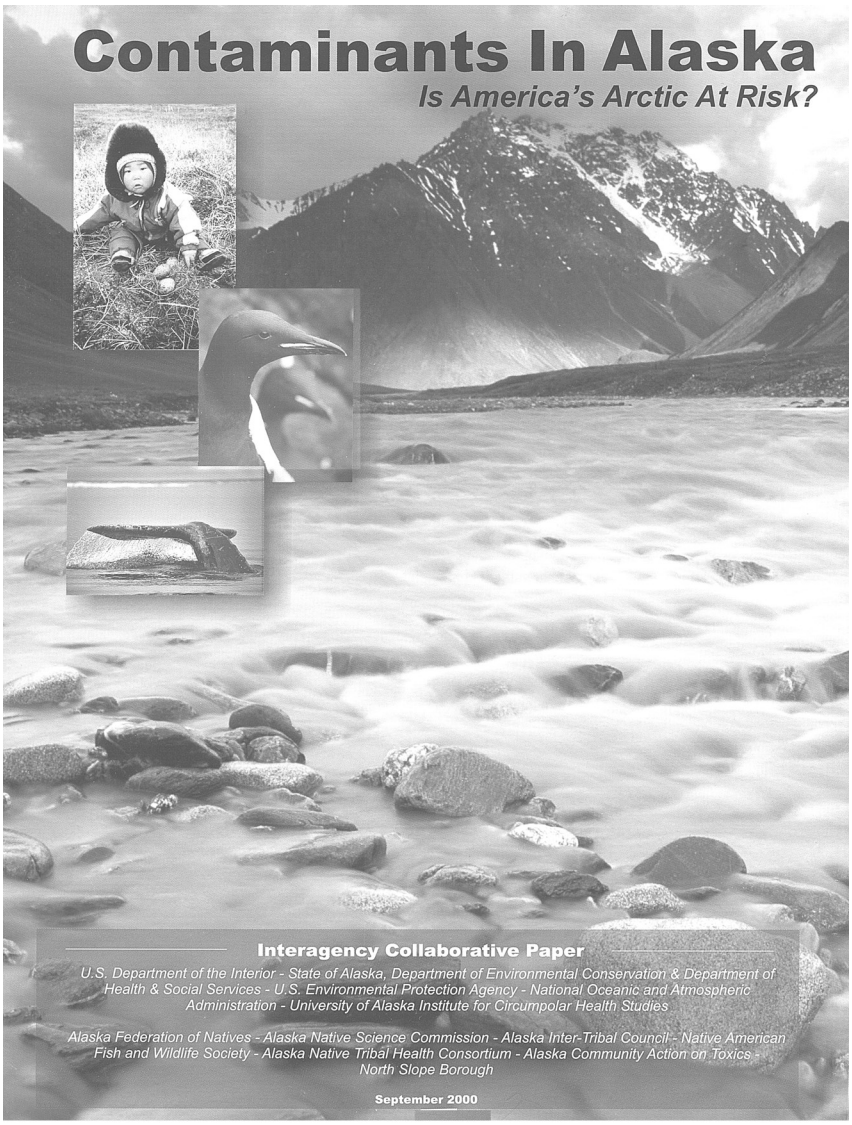
most immediately to the indigenous people of the Arctic region. Clearly, all Americans are at risk to known and future Persistant Organic Pollutants.

The recent May 7th report of an orca, found dead on the Olympic Peninsula, is the same whale species found in Alaska waters. The high level of the Persistant Organic Pollutants found in the orca, by scientists of the National Marine Fisheries Service, is a red alert to the urgency of this matter.

Please, allow me to enter this document into the record. I urge you to take action to protect us, our Arctic, and oceans from currently known Persistant Organic Pollutants, as well as, those yet to be identified and listed. Thank you for this opportunity and any future opportunities to meet with your committee on this very urgent matter.

Sincerely,

JIM AYERS,
Director.


Contaminants In Alaska
Is America's Arctic At Risk?
Interagency Collaborative Paper
U.S. Department of the Interior - State of Alaska, Department of Environmental Conservation & Department of Health & Social Services - U.S. Environmental Protection Agency - National Oceanic and Atmospheric Administration - University of Alaska Institute for Circumpolar Health Studies
Alaska Federation of Natives - Alaska Native Science Commission - Alaska Inter-Tribal Council - Native American Fish and Wildlife Society - Alaska Native Tribal Health Consortium - Alaska Community Action on Toxics - North Slope Borough
September 2000

Contaminants in Alaska: Is America's Arctic at Risk?

Changes are occurring in America's Arctic. Chemicals rarely used in the Arctic are appearing in Alaska's air, water, fish, plants, and wildlife. These contaminants are of concern locally and globally. Locally, fish and wildlife are an essential part of the Alaskan Native diet and culture. Globally, this unanticipated concentration of pollutants may be sending an important message about how contaminants travel and accumulate far from the original source. The presence of environmental pollutants in the Arctic is particularly troubling because the Arctic ecosystem is fragile and slow to recover from impacts.

U.S. Department of Interior

"The act and ritual of our subsistence food activities encompass who we are, and all that we are and is a vital source of our spirituality. I emphasize these things because I want you to know how much of an impact the threat of contaminants has on these things which are so sacred to us."

Sally Smith, Chairperson,
Alaska Native Health Board

The contaminants of greatest concern are persistent organic pollutants, or POPs. These include DDT, PCBs, and dioxins. POPs have a broad range of negative effects. They are transported to the Arctic by large-scale air and water currents and some migratory species. Heavy metals, including mercury, cadmium, selenium, arsenic, and lead are also of great concern in the Arctic, and some are occurring at levels that can't be explained by natural releases.

The levels of persistent organic pollutants found in the Alaskan Arctic are surprising because POPs were not manufactured in the Arctic. Although this paper focuses on the long-range transport of contaminants, some POPs were used at military installations during World War II and the Cold War, and these sites also concern local residents.

The use of some POPs has been banned for many years in the United States, Canada, and some European nations. However, these contaminants can travel long distances from areas in Russia, Asia, and other countries where they are still used.

POPs and heavy metals are showing up in Alaska's wildlife. In the Aleutian Islands for example, bald eagles, sea otters, and Steller sea lions all have elevated levels of the pesticide DDT and some other contaminants. Concentrations of the pesticide hexachlorohexane (HCH) in male polar bears from Alaska are among the highest in the

Arctic. Sea otters from Adak on the Aleutian Chain had concentrations of DDT 36 times higher than sea otters in Southeast Alaska. Some killer whales in the North Pacific are now considered among the most contaminated marine mammals on earth.

People also are exposed to these pollutants. Canadian studies have shown that the concentration of PCBs in the blood of adult Inuit is approximately seven times higher than in other North American adult populations that have been tested. Preliminary studies also show that Alaskan Natives in western and southwestern communities have also been exposed to PCBs and DDT.

"Much of the cultural traditions, values, and subsistence activities has been passed from generation to generation, so much of the lifestyle remains even with the great changes that have been brought about by the western world . . . . The Arctic is our classroom. Our inherent cultural traditions, values and beliefs are in danger of being lost."

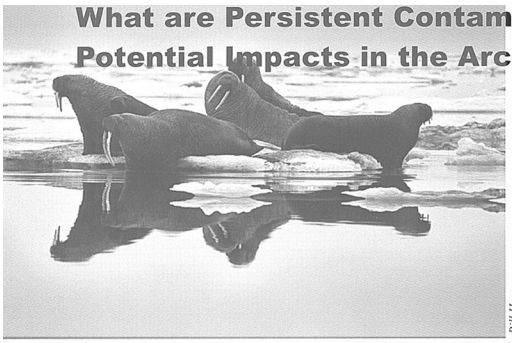
Sterling Gologergen,Yupik from Savoonga, St. Lawrence Island, in northwestern Alaska.

The world's Arctic is at risk from potentially harmful contaminants. In Alaska, they have been found in water, air, wildlife, and humans. There is good reason to suspect that harmful effects are likely in some instances, but conclusive evidence is lacking. An organized, systematic approach is needed to properly evaluate the real risks posed by these chemicals and to identify actions needed to reduce unacceptable risks. As many other Arctic countries have done, the United States should establish a fully funded Arctic contaminants program. By taking action now, Alaska's rich natural resources can be protected for future generations.

Goals for Establishing a U.S. Arctic Contaminants Program

- **Educate people** about contaminants and their impacts on humans and wildlife in the U.S. Arctic ecosystems
- **Commit resources** for a long-term research and monitoring program to assess and track contaminants in Alaska's Arctic ecosystems
- **Strengthen partnerships** between federal and state agencies, universities, Alaskan Native tribes and organizations, and communities to address critical contaminant issues
- **Reduce and eliminate exposure** to persistent organic pollutants and heavy metals through strong national initiatives and international agreements, such as the POPs Treaty

What are Persistent Contaminants and Their Potential Impacts in the Arctic?



Bill Hess

"There is a real hesitancy about eating the clams now. When I was a kid, you know, we used to eat the muscles on the clam raw. But now you don't anymore."

Elaine Abraham, Yakutat

Toxic chemicals accumulating in the Arctic include **persistent organic pollutants**, or POPs, such as DDT and PCBs, and **heavy metals**, including mercury, cadmium, and lead. While some heavy metals provide essential micronutrients, others are naturally toxic. All metals have serious negative effects at high concentrations.

POPs and heavy metals are particularly troublesome in the Arctic because they:

- **Travel long distances** in air and water currents, are transported by some migratory animal species, and tend to get trapped in colder environments
- **Persist** long after they are released and move from air and water into soil, plants, animals and humans
- **Magnify** in living organisms: POPs accumulate in fat; heavy metals generally accumulate in organs and muscle
- **Cause adverse effects,** sometimes at very low levels of exposure

Evidence is increasing from scientific studies of humans and animals that exposure to POPs and heavy metals can result in significant adverse effects, particularly when the exposure occurs during the early stages of life. These effects include:

- **Reproductive effects:** reduced ability to conceive and carry offspring
- **Immunological effects:** decreased ability to fight off disease
- **Neurological and developmental effects:** reduced growth and permanent impairment of brain function
- **Cancer:** a number of POPs are known or suspected carcinogens

We do not know, however, the significance of exposure to these pollutants for people and wildlife living in Arctic environments. A major effort is required to improve our understanding of the effects of exposure to generally low levels of contaminants on human and animal populations.

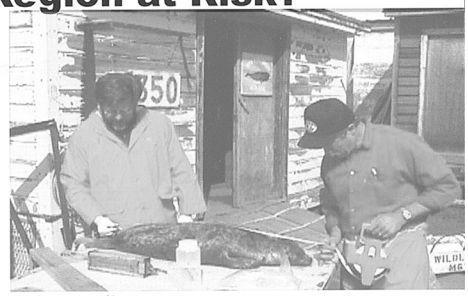
POPs at a Glance

POPs are human-made chemicals that are highly resistant to breakdown by ordinary natural processes. There are three categories:

- **industrial chemicals** such as polychlorinated biphenyls (PCBs) and hexachlorobenzene (HCB)
- **industrial waste byproducts** such as dioxins and furans
- **pesticides** such as DDT and chlordane

Why is the Arctic Region at Risk?

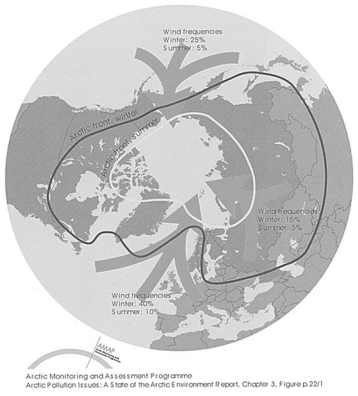
Dr. Todd O'Hara and Mr. Craig George, researchers for the North Slope Borough Department of Wildlife Management, measure a ringed seal as part of a contaminant sampling project in cooperation with local hunters in Barrow.

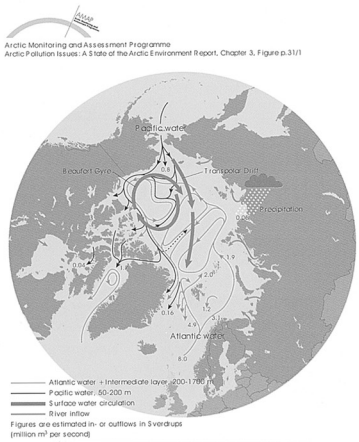


U.S. Department of Interior

Although many think of the U.S. Arctic as relatively untouched by humans, contaminants are being found in the air, water, fish, plants, and wildlife. The cold Arctic environment is a sink or settling area for these contaminants which circulate around the globe and northward in air and ocean currents. They settle out in Arctic waters, sea ice, and land, where they remain for long periods and break down very slowly because of the colder climate.

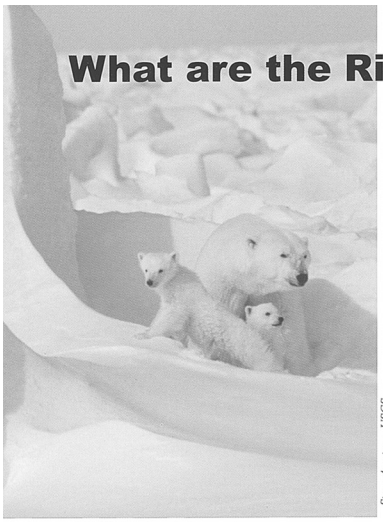
America's Arctic, as specified by law, includes northern and western regions of Alaska comprising approximately half the state. The Arctic Monitoring and Assessment Programme defines it more broadly and includes much of southcentral Alaska.





Air currents move contaminants into Alaska's waters, sea ice, and land from industrial, agricultural and other sources throughout the world. Ocean currents are also key pathways for long-range transport of contaminants. Several large rivers enter the Arctic, possibly carrying contaminants that could be transported to Alaska coastal waters.

What are the Risks to Fish & Wildlife?



Steve Amstrup, USGS

"People on the island are very concerned about the animals we eat now. They think that there might be something wrong because they are getting real skinny...The Elders said that there never used to be cancer but now they are getting cancer."

Herman Toolie, Savoonga, St. Lawrence Island, Traditional Knowledge Project

The Bering Sea, Arctic Ocean, and tundra support a rich diversity of wildlife. The Arctic is the breeding, nesting, and rearing habitat for a wide range of species including seabirds, waterfowl, shorebirds, whales, polar bears, and caribou. Migratory animals come north to raise their young among the abundance of krill, plankton, insects, and undisturbed habitat. The edge of the Arctic ice pack provides habitat for polar bears and their prey such as Pacific walrus, and ribbon and ringed seals. Beluga and killer whales feast on the abundance of fish and other marine organisms. Contaminants move through and accumulate in the higher levels of this food chain.

Migratory animals can bring contaminants from outside Alaska. For example, migratory birds can have 100 times higher concentrations of some POPs compared to birds that do not migrate.

Studies have documented population declines in some of these species, but the cause of these changes is poorly understood. According to a recent report from the Alaska Native Science Commission, traditional ecological observations made by Native people increasingly note the presence of diseases and abnormalities in the fish and wildlife species they rely upon for food. Possible links between contaminants and these changes need to be thoroughly investigated, using the complementary methodologies of western science and Alaska Native traditional knowledge.

Recent Studies Provide Warning Signs About Contamination:

Although much remains unknown, some recent studies show that contaminants are present in some Alaskan wildlife species. Examples include:

Exxon Valdez Oil Spill

Sea otters from Adak Island on the Aleutian Chain have DDT concentrations up to 36 times greater than sea otters in Southeast Alaska.

Exxon Valdez Oil Spill

The contaminant concentrations in some Alaska **killer whales** are as high as or higher than levels found in beluga whales in the St. Lawrence River estuary in Canada where high contaminant loads may be causing reductions in survival of young animals.

"We're Indian people, we don't use pesticides. Yet we have it all over our land .... I'd like us to face the question of whether it is safe to eat. From my perspective, the benefits [of eating subsistence foods] far outweigh the risks."

Paul Erhart, Tanana, Traditional Knowledge and Contaminants Project

U.S. Department of Interior

Contaminant levels recorded in **peregrine falcons** in Interior and Arctic Alaska from 1979 to 1995 revealed mercury at levels known to be harmful to reproduction.

Ted Swem, U.S. Fish & Wildlife

POPs were found in **northern fur seals** in a recent Alaskan study of the biological effects of contaminants. Higher contaminant levels in the pups were correlated with diminished immune function.

Suzanne Marcy, U.S. EPA

A study of Aleutian **green-winged teals** revealed that mercury concentrations in 25 percent of the eggs collected were high enough to cause deformities in chicks. More than 25 percent of the samples had PCB contamination high enough to cause reduced hatching of eggs in the laboratory.

Susan Woodward, U.S. Fish & Wildlife

Bald eagles from the western Aleutians in one of the most remote national wildlife refuges in the United States have elevated concentrations of DDT.

Exxon Valdez Oil Spill

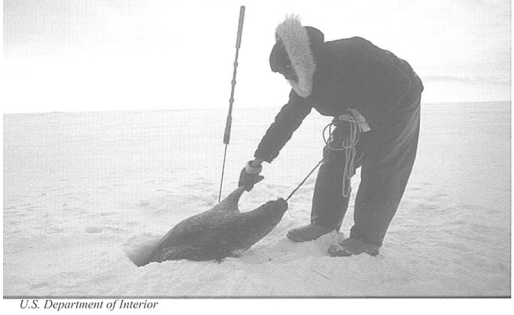
Steller sea lions in the western part of their range, where populations are declining, have higher levels of some persistent organic pollutants than eastern populations.

National Oceanic Atmospheric Admin.

Blubber from **beluga whales** from the eastern Chukchi Sea has slightly higher levels of PCBs and pesticides than blubber from belugas of Southcentral Alaska.

Arctic Project

How Do Contaminants Affect People?



U.S. Department of Interior

"Alaska Native people have been living as a part of the Arctic ecosystem for millennia, and in most areas, they still do. As consumers of local resources, they in some ways are the end recipients of the type of pollutants that are transported long distances."

Arctic Monitoring and Assessment Programme, 1997

In the U.S. Arctic, human exposure to pollutants occurs primarily through eating subsistence foods. Traditional Alaska Native lifestyles are based on hunting, fishing, and close relationships to the land. In most communities, village residents have few culturally acceptable, nutritious, and affordable alternatives to their traditional foods because there are few or no roads, restaurants, or supermarkets. Alaskans live in a vast territory, which is home to approximately 227 federally recognized tribes, representing more than 40% of the tribes in the entire United States. In Alaska there are Alutiq, Yup'ik, Chup'ik, Sugpiaq, Tlingit, Haida, Eyak, Tsimpsian, Inupiat and Athabascan peoples, each with their own language, arts, and traditions. Subsistence foods are an essential part of these cultures.

Subsistence users rely on many animals for food including seals, whales, fish, birds, and bird eggs. Persistent contaminants have a tendency to accumulate in fatty tissues and organs. People in the north tend to eat more organ meats and fats than people further south. POPs can concentrate in living organisms at 70,000 times the levels found in soil or water. People in northern communities are concerned that contaminants may be affecting their health and the health of the natural resources on which they depend.

During the past 10 years, studies have noted the presence of cadmium, methyl mercury and persistent organic pollutants in species traditionally harvested and consumed in Alaska. Although these initial assessments demonstrated that villagers had been exposed to these contaminants, the levels do not warrant recommending any restrictions to using traditional foods at this time because of the overall benefits of a subsistence diet.

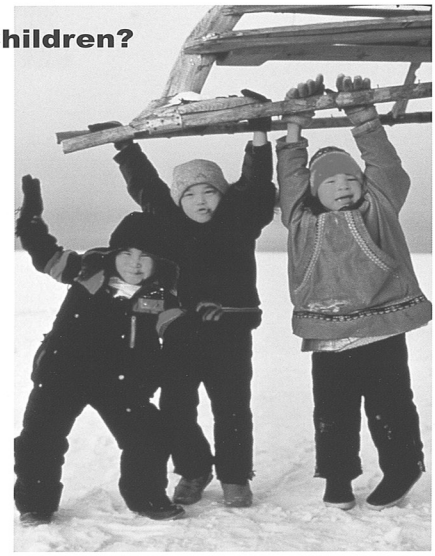
Traditional foods provide relatively inexpensive and readily available nutrients, essential fatty acids, antioxidants, calories, protein, and many health benefits. Some of these benefits include protection from diabetes and cardiovascular disease, improved maternal nutrition and neonatal and infant brain development. Severely limiting the consumption of traditional foods may result in harm because reduction of the consumption of foods that have health benefits may increase the consumption of "store-bought" foods that do not have these positive qualities.

Contaminant risks associated with consumption patterns of traditional foods are unknown. At this time, we lack information about contaminant levels in traditional foods. We also need to know how these levels may be changing over time so we can understand the possible effects on human health in northern regions. Further studies are necessary to determine contaminant concentrations in subsistence foods and evaluate the potential health effects for subsistence users.

What are the Risks to Children?

"Alaska Native infants have a much higher rate of hospitalization for infection than any other group of U.S. infants. The reasons for this disparity are not known, but it is not due to vaccine-preventable diseases, or to recognizable immune deficiency syndromes. Prenatal exposure to contaminants, which are known to affect the developing immune system, could play a role, and that possibility is now being examined."

Jim Berner, Director for the Office of Community Health Services, Pediatrician, Alaska Native Tribal Health Consortium



U.S. Department of Interior

Fetuses, infants, and nursing babies are most vulnerable to the effects of contaminants. Their developing cells are more sensitive to the potential effects of POPs and heavy metals, and the growing brain is especially sensitive to adverse effects. Moreover, POPs move readily from mother to fetus through the umbilical cord, and to infants through mothers' milk.

There is extensive documentation from Arctic Canada that Native women and their babies are exposed to POPs. Inuit women have PCB levels in their breast milk that are five times higher than those in southern Canada.

Much less information exists about exposure to and documented effects of contaminants on infants and children from the U.S. Arctic. We do know that effects may be variable and subtle, which can make them difficult to detect. In a study from the northeastern United States, researchers found that Mohawk babies who had significant amounts of PCBs in their umbilical cords performed more poorly than less exposed babies on tests assessing visual recognition of faces, ability to shut out distractions, and overall intelligence.

Why is the Arctic important to the U.S?

Family Photo Jessie Paul Nagaruk

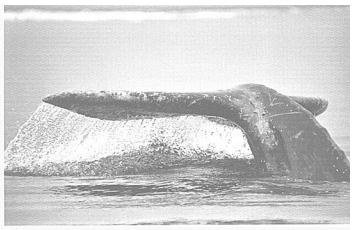
Environmental change in the U.S. Arctic may be an early warning of changes for other parts of the country and world. The Arctic serves primarily as a "sink" or settling area for many of these pollutants. Contaminants in the Arctic are incorporated in the food chain, accumulating in a variety of resident and migratory fish and wildlife species. Migratory species typically summer in the Arctic and winter in lower latitudes, thus contamination of these birds, fish, and mammals should be a concern for the entire nation, not just Alaskans.

The Arctic is valued internationally for its expansive tundra, majestic mountains, unique wildlife and clean coastal waters. Americans care deeply about these lands; many are national parks, preserves and national wildlife refuges that benefit all Americans.

Contamination in the Arctic threatens the region's unique resources, including subsistence foods central to indigenous Arctic peoples' way of life. Alaska is one of the last places in the nation where residents rely heavily upon hunting and fishing and have a close relationship to the land for survival and cultural identity. Thus, the potential contamination of traditional food raises problems that extend beyond the usual scope of public health.

The United States lacks a strong national Arctic contaminant research and monitoring program, thus research and public education lag far behind most programs in other Arctic nations. We have many unanswered questions regarding the extent and significance of this contamination. By comparison, Canada's multi-million-dollar Northern Contaminants Program has developed much more comprehensive information that directly engages indigenous people to assess contaminants and evaluate potential risks. Many northern European countries, including Sweden, Norway, Finland, and Denmark, also have active Arctic monitoring and assessment programs.

What Can We Do?



Bill Hess

Educate people about Arctic contaminants and their impacts in the U.S.

The U.S. needs a comprehensive outreach program that educates and communicates information about contaminants in the Arctic so people can make informed decisions to minimize risks to their families and communities. Currently, we are far behind most other Arctic countries in providing the type of information crucial to the overall health of our citizens.

Commit resources for a long-term cooperative research and monitoring program to assess and track contaminants in Alaska's Arctic ecosystems.

We need to know more about contaminants in the north, including the geographic distribution of various contaminants, potential biological and human health effects of these compounds, and long-term trends. Monitoring should focus on key indicator species that feed at a high level on the food chain, species used as traditional foods for subsistence and those with declining populations, since contaminants may play a role in these declines. Another key priority is to determine the effects of chemical mixtures on human health and Arctic ecosystems. We need diet surveys to determine what and how much people are eating of potentially contaminated resources. Researchers must also continue to compare Alaskan data with those of other Arctic regions, in collaboration with the eight-nation Arctic Council, as part of the Arctic Monitoring and Assessment Programme (AMAP).

Strengthen partnerships between federal and state agencies, universities, Alaska Native tribes and organizations, and communities.

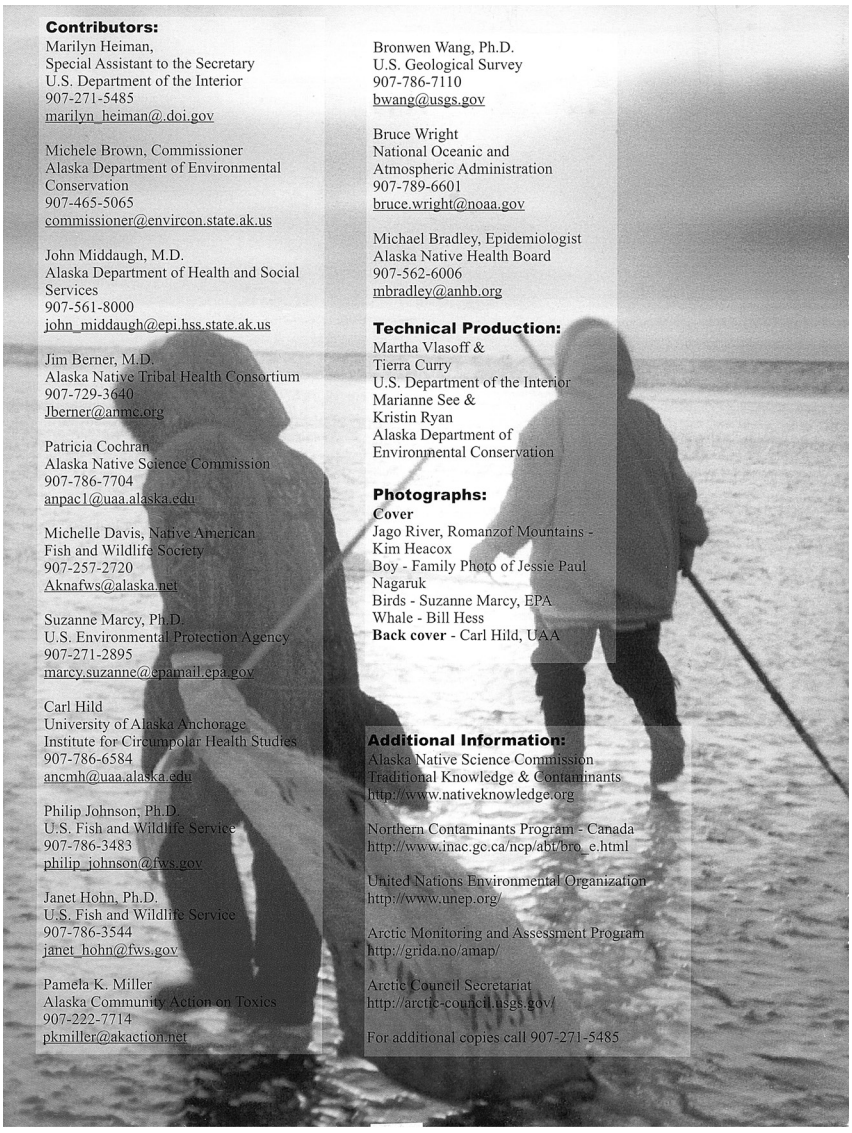
Effective coordination will improve future efforts by agencies, tribes, private and nonprofit entities, and universities. Better coordination of methods, standards, testing, and increased community involvement about contaminants will save time and money, avoid duplication, and ensure that the results are relevant and are communicated in a culturally appropriate manner.

Reduce exposures to POPS and heavy metals.

We need to lead and support the development of a strong international treaty to reduce or eliminate production and use of POPs throughout the world. The international POPs treaty will be an agreement that will immeasurably protect the health and well being of all peoples, with special benefits to those in the vulnerable American Arctic. We should promote international agreements to reduce or eliminate production and use of other toxic substances such as mercury.

"Agencies and organizations have conducted research on contaminants in Alaska. Despite this effort, the concerns, needs and issues of Alaskan Native communities in regard to contaminants have largely been unmet. Experience from the Canadian Northern Contaminants Program shows that indigenous people are very capable of collaborating with other organizations and agencies in research and programs dealing with contaminant issues. Efforts to incorporate Native involvement in directing contaminant programs in Alaska is long overdue and is the only solution for meeting Native needs and concerns."

Mike Bradley, Epidemiologist, Alaska Native EpiCenter, Alaska Native Health Board



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Additional Information:
Alaska Native Science Commission
Traditional Knowledge & Contaminants
http://www.nativeknowledge.org

Northern Contaminants Program - Canada
http://www.inac.gc.ca/ncp/abt/bro_e.html

United Nations Environmental Organization
http://www.unep.org/

Arctic Monitoring and Assessment Program
http://grida.no/amap/

Arctic Council Secretariat
http://arctic-council.usgs.gov/

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107TH CONGRESS
2D SESSION

S. 2118

To amend the Toxic Substances Control Act and the Federal Insecticide, Fungicide, and Rodenticide Act to implement the Stockholm Convention on Persistent Organic Pollutants and the Protocol on Persistent Organic Pollutants to the Convention on Long-Range Transboundary Air Pollution.

IN THE SENATE OF THE UNITED STATES

APRIL 11, 2002

Mr. JEFFORDS introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To amend the Toxic Substances Control Act and the Federal Insecticide, Fungicide, and Rodenticide Act to implement the Stockholm Convention on Persistent Organic Pollutants and the Protocol on Persistent Organic Pollutants to the Convention on Long-Range Transboundary Air Pollution.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the "POPS Implementation Act of 2002".

"(E) CLOSED-SYSTEM SITE-LIMITED INTERMEDIATE.—

"(i) EXEMPTION.—To the extent consistent with the POPs Convention, the prohibitions specified in paragraphs (1) and (2) shall not apply to any quantity of a POPs chemical substance or mixture that is manufactured and used as a closed-system site-limited intermediate, if, before the commencement of the manufacture or use under the POPs Convention, and at the end of each 10-year period thereafter—

"(I) any person that desires to invoke the exemption provides to the Administrator information concerning—

"(aa) the annual total quantity of the POPs chemical substance or mixture anticipated to be manufactured or used or a reasonable estimate of the quantity; and

"(bb) the nature of the closed-system site-limited process, including the quantity of any

"(C) RESEARCH.—To the extent consistent with the POPs Convention, the prohibitions specified in paragraphs (1) and (2) shall not apply to any quantity of a POPs chemical substance or mixture that is used for laboratory scale research or as a reference standard.

"(D) CONSTITUENT OF ARTICLE IN USE BEFORE PROHIBITION APPLIED.—To the extent consistent with the POPs Convention, the prohibitions specified in paragraphs (1) and (2) shall not apply to any quantity of a POPs chemical substance or mixture that occurs as a constituent of an article (other than a PCB article, which may continue to be used in accordance with Annex A to the POPs Convention and paragraph 6 of Article 3 of the POPs Convention), if—

"(i) the article is manufactured or in use on or before the date of entry into force of the obligation applicable to the POPs chemical substance or mixture; and

"(ii) the Administrator has met any applicable requirement of the POPs Convention to notify the Secretariat of the POPs Convention concerning the article.

processing, distribution in commerce, use, or disposal of a POPs chemical substance or mixture that the Administrator determines, through final regulations promulgated under subsection (a)—

"(i) is consistent with—

"(I) a production or use specific exemption under Annex A or B to the POPs Convention; or

"(II) an acceptable purpose available to the United States under Annex B to the POPs Convention; and

"(ii) would, as a result, not prevent the United States from complying with the obligations of the United States under the POPs Convention.

"(B) UNINTENTIONAL TRACE CONTAMINANTS.—To the extent consistent with the POPs Convention, the prohibitions specified in paragraphs (1) and (2) shall not apply to any quantity of a POPs chemical substance or mixture that occurs as an unintentional trace contaminant in an article.

ronment that are significantly greater than the risks presented by the chemical substance or mixture.

"(iii) EFFECTIVENESS OF FINAL REGULATIONS.—Final regulations relying on an unreasonable risk of injury to health or the environment resulting from an amendment by the Conference under this paragraph shall become effective only to the extent that an amendment adding the chemical substance or mixture to Annex A or B to the POPs Convention has entered into force with respect to the United States under paragraph 4 of Article 22 of the POPs Convention.

"(iv) EXEMPTION FROM REQUIREMENT TO PUBLISH STATEMENT.—In any rulemaking under this subparagraph, the Administrator shall not be required to publish a statement under subsection (c)(1).

"(3) EXEMPTIONS.—

"(A) EXEMPTIONS UNDER POPS CONVENTION.—The prohibitions specified in paragraphs (1) and (2) shall not apply to any manufacture,

use, or disposal of the chemical substance or mixture that is or would be inconsistent with the amendment described in that clause (as determined by the Administrator with the concurrence of the Secretary of State) shall be deemed to present an unreasonable risk of injury to health or the environment.

"(II) EXCEPTIONS.—Subclause (I) shall not apply to a chemical substance or mixture to the extent that the Administrator determines that—

"(aa) any or all of the manufacture, processing, distribution in commerce, use, or disposal is necessary to prevent significant harm to an important sector of the economy; and

"(bb) each substitute that the Administrator evaluates based on reporting under section 8(f) and other information available to the Administrator presents risks to health or the envi-

"(ii) with respect to which regulations have been promulgated under subparagraph (B).

"(B) REGULATIONS BY THE ADMINISTRATOR.—

"(i) CHEMICAL SUBSTANCE OR MIXTURE LISTED UNDER POPS CONVENTION.—Notwithstanding any other provision of law, if the Conference adopts an amendment to list a chemical substance or mixture in Annex A or B to the POPs Convention, the Administrator may, at the discretion of the Administrator, commence a rulemaking under subsection (a) to prohibit or restrict any manufacture, processing, distribution in commerce, use, or disposal of the chemical substance or mixture that is or would be inconsistent with the amendment.

"(ii) DETERMINATION OF UNREASONABLE RISKS.—

"(I) IN GENERAL.—Subject to subclause (II), in any rulemaking described in clause (i), any manufacture, processing, distribution in commerce,

SEC. 102. REGULATION OF HAZARDOUS CHEMICAL SUBSTANCES AND MIXTURES.

Section 6 of the Toxic Substances Control Act (15 U.S.C. 2605) is amended by adding at the end the following:

"(f) POPs CONVENTION.—

"(1) PROHIBITION ON SPECIFIED POPS CHEMICAL SUBSTANCES AND MIXTURES.—Subject to paragraph (3) and the POPs Convention, notwithstanding any other provision of law, a person shall not manufacture, process, distribute in commerce, use, or dispose of a POPs chemical substance or mixture specified in any of subparagraphs (A) through (J) of section 3(16).

"(2) PROHIBITION ON OTHER POPS CHEMICAL SUBSTANCES AND MIXTURES.—

"(A) IN GENERAL.—Subject to paragraph (3), notwithstanding any other provision of law, a person shall not manufacture, process, distribute in commerce, use, or dispose of a POPs chemical substance or mixture described in section 3(16)(K)—

"(i) that is not subject to paragraph (1); and

"(G) hexachlorobenzene;

"(H) mirex;

"(I) PCBs;

"(J) toxaphene; and

"(K) any other chemical substance or mixture—

"(i) that is listed in Annex A or B to the POPs Convention; and

"(ii) with respect to which an amendment adding the chemical substance or mixture to Annex A or B to the POPs Convention has entered into force with respect to the United States under paragraph 4 of Article 22 of the POPs Convention.

"(17) POPS CONVENTION.—The term 'POPs Convention' means the Stockholm Convention on Persistent Organic Pollutants, done at Stockholm on May 22, 2001.

"(18) POPS REVIEW COMMITTEE.—The term 'POPs Review Committee' means the Persistent Organic Pollutants Review Committee established under paragraph 6 of Article 19 of the POPs Convention.".

"(ii) that is not listed in Annex A or B to the POPs Convention; and

"(B) with respect to which the listing in Annex I or II to the LRTAP POPs Protocol has entered into force with respect to the United States under paragraph 3 of Article 14 of the LRTAP POPs Protocol.

"(11) LRTAP POPS PROTOCOL.—The term 'LRTAP POPs Protocol' means the Protocol on Persistent Organic Pollutants to the LRTAP Convention, done at Aarhus on June 24, 1998."; and

(6) by inserting after paragraph (14) (as redesignated by paragraph (2)) the following:

"(15) PCB.—The term 'PCB' means a polychlorinated biphenyl.

"(16) POPS CHEMICAL SUBSTANCE OR MIXTURE.—The term 'POPs chemical substance or mixture' means—

"(A) aldrin;

"(B) chlordane;

"(C) dichlorodiphenyltrichloroethane (DDT); and

"(D) dieldrin;

"(E) endrin;

"(F) heptachlor;

paragraphs (5), (6), (8), (12), (13), (14), (19), (20), (21), (22), and (23), respectively;

(3) by inserting after paragraph (3) the following:

"(4) CONFERENCE.—The term 'Conferenee' means the Conference of the Parties established by paragraph 1 of Article 19 of the POPs Convention.";

(4) by inserting after paragraph (6) (as redesignated by paragraph (2)) the following:

"(7) EXECUTIVE BODY.—The term 'Executive Body' means the Executive Body established by Article 10 of the LRTAP Convention.";

(5) by inserting after paragraph (8) (as redesignated by paragraph (2)) the following:

"(9) LRTAP CONVENTION.—The term 'LRTAP Convention' means the Convention on Long-Range Transboundary Air Pollution, done at Geneva on November 13, 1979 (TIAS 10541).

"(10) LRTAP POPS CHEMICAL SUBSTANCE OR MIXTURE.—The term 'LRTAP POPs chemical substance or mixture' means any chemical substance or mixture—

"(A)(i) that is listed in Annex I or II to the LRTAP POPs Protocol; but

(b) TABLE OF CONTENTS.—The table of contents of this Act is as follows:

Sec. 1. Short title; table of contents.

TITLE I—USE OR PRODUCTION OF POPS CHEMICAL SUBSTANCES OR MIXTURES

Sec. 101. Definitions.
Sec. 102. Regulation of hazardous chemical substances and mixtures.
Sec. 103. Reporting and retention of information.
Sec. 104. International conventions and cooperation in international efforts.
Sec. 105. Exports.
Sec. 106. Prohibited acts.
Sec. 107. Research program to support POPs Convention.

TITLE II—USE OR PRODUCTION OF POPS PESTICIDES

Sec. 201. Definitions.
Sec. 202. Registration of pesticides.
Sec. 203. Unlawful acts.
Sec. 204. Imports, exports, and international conventions.
Sec. 205. Conforming amendments.

TITLE I—USE OR PRODUCTION OF POPS CHEMICAL SUBSTANCES OR MIXTURES

SEC. 101. DEFINITIONS.

Section 3 of the Toxic Substances Control Act (15 U.S.C. 2602) is amended—

(1) in paragraph (2)(B), by striking clause (ii) and inserting the following:

''(ii) any pesticide that may, under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.), be lawfully sold or distributed for use in the United States,'';

(2) by redesignating paragraphs (4), (5), (6), (7), (8), (9), (10), (11), (12), (13), and (14) as

nontransformed and unintentional trace contamination by the POPs chemical substance or mixture that remains in the final product; and

"(II) notwithstanding any other provision of law, the Administrator—

"(aa) determines, with the concurrence of the Secretary of State, that the information provided under subclause (I) is complete and sufficient; and

"(bb) transmits the information to the Secretariat of the POPs Convention.

"(ii) TERMINATION OF EXEMPTION.—If, at the termination of any 10-year exemption period under clause (i), a particular closed-system site-limited intermediate exemption is no longer authorized for the United States under the POPs Convention, it shall be unlawful for any person to continue to manufacture or use any such POPs chemical substance or mix-

ture as a closed-system site-limited intermediate.

"(F) PCB MATERIALS.—To the extent consistent with the POPs Convention, the prohibitions specified in paragraphs (1) and (2) shall not apply to any PCB materials described in Part II of Annex A to the POPs Convention if the PCB materials are handled in accordance with the POPs Convention, including Annex A to the POPs Convention.

"(G) DISTRIBUTION IN COMMERCE FOR EXPORT IF PRODUCTION OR USE SPECIFIC EXEMPTION OR ACCEPTABLE PURPOSE IS IN EFFECT.—

"(i) IN GENERAL.—To the extent consistent with the POPs Convention, the prohibitions specified in paragraphs (1) and (2) shall not apply to any distribution in commerce for export of any POPs chemical substance or mixture for which a production or use specific exemption under Annex A to the POPs Convention is in effect, or for which a production or use specific exemption or acceptable purpose under Annex B to the POPs Convention is in ef-

fect, if the POPs chemical substance or mixture complies with an export condition described in clause (ii), (iii), or (iv).

"(ii) EXPORT FOR ENVIRONMENTALLY SOUND DISPOSAL.—An export condition referred to in clause (i) is that the POPs chemical substance or mixture is exported for the purpose of environmentally sound disposal in accordance with paragraph 1(d) of Article 6 of the POPs Convention.

"(iii) EXPORT TO PARTY WITH PERMISSION TO USE.—An export condition referred to in clause (i) is that the POPs chemical substance or mixture is exported to a party to the POPs Convention that is permitted to use the POPs chemical substance or mixture under Annex A or B to the POPs Convention.

"(iv) EXPORT TO NONPARTY IN ACCORDANCE WITH NONPARTY CERTIFICATION.—

"(I) IN GENERAL.—An export condition referred to in clause (i) is that the POPs chemical substance or mixture is exported, to an importing

country that is not a party to the POPs Convention with respect to the POPs chemical substance or mixture, for distribution in commerce or use in accordance with a complete and accurate nonparty certification that the importing country annually provides to the Administrator.

"(II) COMMITMENTS BY IMPORTING NONPARTY.—Consistent with the POPs Convention, an annual nonparty certification under subclause (I) shall specify the intended use of the POPs chemical substance or mixture and state that, with respect to the POPs chemical substance or mixture, the importing nonparty is committed to—

"(aa) protecting human health and the environment by taking necessary measures to minimize or prevent releases;

"(bb) complying with paragraph 1 of Article 6 of the POPs Convention; and

"(cc) complying, to the extent appropriate, with paragraph 2 of Part II of Annex B to the POPs Convention.

"(III) SUPPORTING DOCUMENTATION.—Each nonparty certification shall include any appropriate supporting documentation, such as legislation, regulatory instruments, and administrative or policy guidelines.

"(IV) SUBMISSION TO SECRETARIAT OF POPS CONVENTION.—Not later than 60 days after the date of receipt of a complete nonparty certification, the Administrator shall submit a copy of the nonparty certification to the Secretariat of the POPs Convention.

"(II) EXPORT FOR ENVIRONMENTALLY SOUND DISPOSAL IF NO PRODUCTION OR USE SPECIFIC EXEMPTION IN EFFECT.—To the extent consistent with the POPs Convention, the prohibitions specified in paragraphs (1) and (2) shall not apply to any distribution in commerce for export for the purpose of environmentally

sound disposal, in accordance with paragraph 1(d) of Article 6 of the POPs Convention, of a POPs chemical substance or mixture listed in Annex A to the POPs Convention for which no production or use specific exemption is in effect for any party to the POPs Convention.

"(I) IMPORTS FOR SPECIFIED PURPOSES.—To the extent consistent with the POPs Convention, the prohibitions specified in paragraphs (1) and (2) shall not apply to any distribution in commerce of a POPs chemical substance or mixture that is imported—

"(i) for the purpose of environmentally sound disposal in accordance with paragraph 1(d) of Article 6 of the POPs Convention; or

"(ii) for a purpose authorized under final regulations promulgated under this subsection.

"(J) WASTE.—To the extent consistent with the POPs Convention, the prohibitions specified in paragraphs (1) and (2) shall not apply to any quantity of a POPs chemical substance or mixture, including any article that consists of, contains, or is contaminated with a

POPs chemical substance or mixture, that has become waste and that is managed in a manner consistent with Article 6 of the POPs Convention.

"(K) NO EFFECT ON OTHER PROHIBITIONS.—Nothing in this paragraph authorizes any manufacture, processing, distribution in commerce, use, or disposal of a POPs chemical substance or mixture that is prohibited under any other provision of law.

"(4) CERTIFICATION STATEMENT ACCOMPANYING POPS CHEMICAL SUBSTANCES OR MIXTURES.—

"(A) IN GENERAL.—Each POPs chemical substance or mixture that is distributed in commerce under subparagraph (A), (C), (E), (F), (G), (H), (I) or (J) of paragraph (3) shall be accompanied by a certification statement.

"(B) PERSON REQUIRED TO PREPARE.—A certification statement required by subparagraph (A) shall be prepared—

"(i) by the manufacturer or processor of the POPs chemical substance or mixture; or

"(ii) if there is no certification statement accompanying the POPs chemical substance or mixture, by any person that distributes the POPs chemical substance or mixture in commerce.

"(C) REQUIRED ELEMENTS.—The certification statement shall contain—

"(i) a specification of the quantity and identity of the POPs chemical substance or mixture;

"(ii) the basis for application of subparagraph (A), (C), (E), (F), (G), (H), (I) or (J) of paragraph (3); and

"(iii) such other information as the Administrator determines to be necessary for effective enforcement of this subsection.

"(D) DUTIES OF DISTRIBUTORS.—Any person that distributes in commerce the POPs chemical substance or mixture shall ensure that—

"(i) the certification statement accompanies the POPs chemical substance or mixture when the POPs chemical substance or mixture is distributed in commerce; and

"(ii) the distribution in commerce is consistent with the certification statement.

"(E) MAINTENANCE OF CERTIFICATION STATEMENT.—A person that prepares a certification statement shall maintain a copy of the certification statement for a period of not less than 3 years beginning on the date on which the certification statement is prepared.

"(F) REGULATIONS.—The Administrator may promulgate such regulations as are necessary—

"(i) to facilitate implementation of this paragraph; and

"(ii) to ensure that this paragraph is implemented in compliance with the POPs Convention.

"(g) LRTAP POPS PROTOCOL.—

"(1) PROHIBITION ON SPECIFIED LRTAP POPS CHEMICAL SUBSTANCES OR MIXTURES.—

"(A) IN GENERAL.—Subject to subparagraph (B) and the LRTAP POPs Protocol, notwithstanding any other provision of law, a person shall not manufacture, process, distribute in commerce, or use any of the following LRTAP POPs chemical substances or mixtures:

"(i) Chlordecone.

"(ii) Hexabromobiphenyl.

"(iii) Hexachlorocyclohexane (HCH).

"(B) ADDITION TO ANNEX A OR B TO POPS CONVENTION.—If a LRTAP POPs chemical substance or mixture specified in subparagraph (A) is added to Annex A or B to the POPs Convention and the amendment making the addition enters into force with respect to the United States under paragraph 4 of Article 22 of the POPs Convention—

"(i) subparagraph (A) shall not apply to the LRTAP POPs chemical substance or mixture; and

"(ii) the LRTAP POPs chemical substance or mixture shall be subject to subsection (f).

"(2) PROHIBITION ON OTHER LRTAP POPS CHEMICAL SUBSTANCES AND MIXTURES.—

"(A) IN GENERAL.—Subject to paragraph (3), notwithstanding any other provision of law, a person shall not manufacture, process, distribute in commerce, use, or dispose of a LRTAP POPs chemical substance or mixture—

"(i) that is not subject to paragraph (1); and

"(ii) with respect to which regulations have been promulgated under subparagraph (B).

"(B) REGULATIONS BY THE ADMINISTRATOR.—

"(i) CHEMICAL SUBSTANCE OR MIXTURE LISTED UNDER LRTAP POPS PROTOCOL.—Notwithstanding any other provision of law, if the parties to the LRTAP POPs Protocol approve an amendment to list a chemical substance or mixture in Annex I or II to the LRTAP POPs Protocol, the Administrator may, at the discretion of the Administrator, commence a rulemaking under subsection (a) to prohibit or restrict any manufacture, processing, distribution in commerce, use, or disposal of the chemical substance or mixture that is or would be inconsistent with the amendment.

"(ii) DETERMINATION OF UNREASONABLE RISKS.—

"(I) IN GENERAL.—Subject to subclause (II), in any rulemaking described in clause (i), any manufacture, processing, distribution in commerce, use, or disposal of the chemical substance or mixture that is or would be inconsistent with the amendment described in that clause (as determined by the Administrator with the concurrence of the Secretary of State) shall be deemed to present an unreasonable risk of injury to health or the environment.

"(II) EXCEPTIONS.—Subclause (I) shall not apply to a chemical substance or mixture to the extent that the Administrator determines that—

"(aa) any or all of the manufacture, processing, distribution in commerce, use, or disposal is necessary to prevent significant harm to an important sector of the economy; and

"(bb) each substitute that the Administrator evaluates

based on reporting under section 8(g) and other information available to the Administrator presents risks to health or the environment that are significantly greater than the risks presented by the chemical substance or mixture.

"(iii) EFFECTIVENESS OF FINAL REGULATIONS.—Final regulations relying on an unreasonable risk of injury to health or the environment resulting from an amendment by the parties to the LRTAP POPs Protocol under this paragraph shall become effective only to the extent that an amendment adding the chemical substance or mixture to Annex I or II to the LRTAP POPs Protocol has entered into force with respect to the United States under paragraph 3 of Article 14 of the LRTAP POPs Protocol.

"(iv) EXEMPTION FROM REQUIREMENT TO PUBLISH STATEMENT.—In any rulemaking under this subparagraph, the

Administrator shall not be required to publish a statement under subsection (c)(1).

"(3) EXEMPTIONS.—

"(A) IN GENERAL.—To the extent consistent with the LRTAP POPs Protocol, the prohibitions on manufacture, processing, distribution in commerce, or use specified in paragraph (1) shall not apply to—

"(i) any manufacture, processing, distribution in commerce, or use of a LRTAP POPs chemical substance or mixture that the Administrator determines, through final regulations promulgated under subsection (a)—

"(I) is consistent with an exemption available to the United States under Annex I or II to the LRTAP POPs Protocol; and

"(II) would, as a result, not prevent the United States from complying with the obligations of the United States under the LRTAP POPs Protocol;

"(ii) any quantity of a LRTAP POPs chemical substance or mixture that is used

for laboratory scale research or as a reference standard;

"(iii) any quantity of a LRTAP POPs chemical substance or mixture that occurs as a contaminant in an article;

"(iv) any quantity of a LRTAP POPs chemical substance or mixture that is in an article manufactured or in use on or before—

"(I) the implementation date of the LRTAP POPs Protocol; or

"(II) in the case of any LRTAP POPs chemical substance or mixture added to any applicable Annex after the implementation date of the LRTAP POPs Protocol, the implementation date of the amendment to the LRTAP POPs Protocol that makes the addition;

"(v) any quantity of a LRTAP POPs chemical substance or mixture that occurs as a site-limited chemical intermediate in the manufacture of 1 or more different substances and that is subsequently chemically transformed;

"(vi) the production or use of any quantity of hexachlorocyclohexane (HCH) that complies with the restrictions and conditions specified for HCH in Annex II to the LRTAP POPs Protocol; and

"(vii) any quantity of a LRTAP POPs chemical substance or mixture that has become waste and that is disposed of in an environmentally sound manner in accordance with paragraph 1(b) of the LRTAP POPs Protocol.

"(B) PETITIONS FOR EXEMPTIONS AUTHORIZED BY LRTAP POPS PROTOCOL.—

"(i) IN GENERAL.—A person may petition the Administrator for an exemption from a prohibition specified in paragraph (1) or (2) that is consistent with the exemptions authorized under paragraph 2 of Article 4 of the LRTAP POPs Protocol.

"(ii) REQUIRED ELEMENTS OF PETITIONS.—Any petition under clause (i) shall, at a minimum, contain—

"(I) information relating to each finding, if any, that the Administrator is required to make under the LRTAP

POPs Protocol before granting the exemption; and

"(II) any additional information, if any, that the Administrator is required to provide to the Secretariat of the LRTAP POPs Protocol concerning a granted exemption.

"(iii) GRANT OR DENIAL OF PETITION.—The Administrator, with the concurrence of the Secretary of State, shall—

"(I) if the petition is authorized for the United States under, and is otherwise consistent with, the LRTAP POPs Protocol, grant the petition with such conditions or limitations as are necessary to meet any requirement of the LRTAP POPs Protocol or any other provision of law; or

"(II) deny the petition.

"(iv) PROVISION OF INFORMATION TO SECRETARIAT.—Notwithstanding any other provision of law, if the Administrator grants the petition, the Administrator, not later than 90 days after the date on which the petition is granted, shall provide the

Secretariat of the LRTAP POPs Protocol with the information specified in paragraph 3 of Article 4 of the LRTAP POPs Protocol.

"(v) DISALLOWANCE OF EXEMPTION BY LRTAP POPS PROTOCOL.—

"(I) IN GENERAL.—If, after an exemption has been granted under this subparagraph, the exemption is no longer authorized for the United States under the LRTAP POPs Protocol, it shall be unlawful for any person to manufacture, process, distribute in commerce, or use a LRTAP POPs chemical substance or mixture in the manner authorized by the exemption.

"(II) PUBLICATION OF NOTICE IN FEDERAL REGISTER.—The Administrator shall publish in the Federal Register a notice announcing the disallowance of any exemption under subclause (I).

"(vi) NO EFFECT ON OTHER PROHIBITIONS.—Nothing in this subparagraph au-

thorizes any manufacture, processing, distribution in commerce, or use of a LRTAP POPs chemical substance or mixture that is prohibited under any other provision of law.

"(4) CERTIFICATION STATEMENT ACCOMPANYING LRTAP POPS CHEMICAL SUBSTANCES OR MIXTURES.—

"(A) IN GENERAL.—Each LRTAP POPs chemical substance or mixture that is distributed in commerce under subparagraph (A)(i), (A)(ii), or (B) of paragraph (3) shall be accompanied by a certification statement.

"(B) PERSON REQUIRED TO PREPARE.—A certification statement required by subparagraph (A) shall be prepared—

"(i) by the manufacturer or processor of the LRTAP POPs chemical substance or mixture; or

"(ii) if there is no certification statement accompanying the LRTAP POPs chemical substance or mixture, by any person that distributes the LRTAP POPs chemical substance or mixture in commerce.

"(C) REQUIRED ELEMENTS.—The certification statement shall contain—

"(i) a specification of the quantity and identity of the LRTAP POPs chemical substance or mixture;

"(ii) the basis for application of subparagraph (A)(i), (A)(ii), or (B) of paragraph (3); and

"(iii) such other information as the Administrator determines to be necessary for effective enforcement of this subsection.

"(D) DUTIES OF DISTRIBUTORS.—Any person that distributes in commerce the LRTAP POPs chemical substance or mixture shall ensure that—

"(i) the certification statement accompanies the LRTAP POPs chemical substance or mixture when the LRTAP POPs chemical substance or mixture is distributed in commerce; and

"(ii) the distribution in commerce is consistent with the certification statement.

"(E) MAINTENANCE OF CERTIFICATION STATEMENT.—A person that prepares a certification statement shall maintain a copy of the

certification statement for a period of not less than 3 years beginning on the date on which the certification statement is prepared.

"(F) REGULATIONS.—The Administrator may promulgate such regulations as are necessary—

"(i) to facilitate implementation of this paragraph; and

"(ii) to ensure that this paragraph is implemented in compliance with the LRTAP POPs Protocol.

"(h) NOTICE AND RECORD OF PROHIBITIONS, EXEMPTIONS, DISALLOWANCES, AND OTHER INFORMATION.—

"(1) IN GENERAL.—The Administrator—

"(A) shall publish in the Federal Register timely notice concerning—

"(i)(I) the POPs chemical substances and mixtures subject to the prohibitions specified in subsection (f);

"(II) any exemptions from the prohibitions authorized under subsection (f); and

"(III) any importing country from which any POPs chemical substance or

mixture has received a nonparty certification under subsection (f)(3)(G)(iv); and

"(ii)(I) the LRTAP POPs chemical substances and mixtures subject to the prohibitions specified in subsection (g); and

"(II) any exemptions from the prohibitions authorized under subsection (g), including any disallowances of exemptions under subsection (g)(3)(B)(v); and

"(B) may include in the notice any other information that the Administrator determines to be necessary to ensure adequate notice of the requirements of—

"(i) this section;

"(ii) the POPs Convention; or

"(iii) the LRTAP POPs Protocol.

"(2) INTEGRATION WITH FIFRA INFORMATION.—The Administrator shall—

"(A) maintain a record that integrates the information in the notice published under paragraph (1) with any information published under section 17(g) of the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. 136o(e));

"(B) update the record as necessary; and

"(C) make the record publicly available."

SEC. 103. REPORTING AND RETENTION OF INFORMATION.

Section 8 of the Toxic Substances Control Act (15 U.S.C. 2607) is amended—

(1) by redesignating subsection (f) as subsection (h); and

(2) by inserting after subsection (e) the following:

"(f) INFORMATION COLLECTION UNDER THE POPS CONVENTION.—

"(1) PROPOSAL FOR LISTING MEETS POPS CONVENTION SCREENING CRITERIA.—

"(A) PUBLICATION OF NOTICE IN FEDERAL REGISTER.—As soon as practicable after the date of a determination by the POPs Review Committee that a proposal for listing a chemical substance or mixture in Annex A, B, or C to the POPs Convention meets the screening criteria specified in Annex D to the POPs Convention, the Administrator shall publish in the Federal Register a notice that—

"(i) identifies the chemical substance or mixture; and

"(ii) summarizes the determination of the POPs Review Committee.

"(B) PROVISION OF INFORMATION TO THE ADMINISTRATOR.—Not later than 60 days after the date of publication of the notice under subparagraph (A), any person that manufactures, processes, distributes, or uses in commerce a chemical substance or mixture that is the subject of the notice shall provide to the Administrator all of the following information that is known or reasonably ascertainable to the person:

"(i) The annual quantity of the chemical substance or mixture manufactured and the locations of the manufacture.

"(ii) The uses of the chemical substance or mixture.

"(iii) The annual quantity of the chemical substance or mixture that enters each environmental medium.

"(iv) Other information monitoring data relating to the chemical substance or mixture that is consistent with the information specified in paragraph 1 of Annex D, and subsections (b) through (e) of Annex E, to the POPs Convention.

"(C) UPDATING OF INFORMATION.—The information provided under subparagraph (B) shall be updated on an annual basis until such time as—

"(i) the Conference determines not to list the chemical substance or mixture in any Annex to the POPs Convention; or

"(ii) the Administrator, with the concurrence of the Secretary of State, determines that such updates are no longer necessary.

"(D) REPORT BY ADMINISTRATOR TO SECRETARY OF STATE.—Based on information received under this paragraph and any other relevant information available to the Administrator, the Administrator, not later than 180 days after the date of publication of the notice under subparagraph (A), shall submit to the Secretary of State a report that contains, at a minimum—

"(i) information on the production and uses in the United States of the chemical substance or mixture; and

"(ii) an assessment of the benefits and risks associated with the production

and uses in the United States of the chemical substance or mixture.

"(2) DECISION TO PROCEED WITH LISTING PROCESS.—

"(A) PUBLICATION OF NOTICE IN FEDERAL REGISTER.—If the POPs Review Committee decides under paragraph 7 of Article 8 of the POPs Convention that a proposal for listing a chemical substance or mixture shall proceed, the Administrator shall publish in the Federal Register a notice that—

"(i) identifies the chemical substance or mixture; and

"(ii) summarizes the decision of the POPs Review Committee.

"(B) PROVISION OF INFORMATION BY MANUFACTURERS, PROCESSORS, AND DISTRIBUTORS.—Not later than 60 days after the date of publication of the notice under subparagraph (A), any person that manufactures, processes, or distributes in commerce a chemical substance or mixture that is the subject of the notice shall provide to the Administrator—

"(i) consistent with the information needs described in Annex F to the POPs

Convention, any information that the person believes is relevant to—

"(I) a risk management evaluation carried out under paragraph 7 of Article 8 of the POPs Convention;

"(II) a decision by the Conference under paragraph 9 of Article 8 of the POPs Convention; or

"(III) an action under section 6(a); and

"(ii) information on any article in use that consists of, contains, or is contaminated with the chemical substance or mixture.

"(3) APPLICABILITY OF INFORMATION REQUIREMENTS.—The information requirements of this subsection shall not apply to a person subject to the requirements to the extent that the person has actual knowledge that the Administrator has been adequately informed of any of the information required to be provided under this subsection.

"(4) EFFECT OF FAILURE TO PROVIDE REQUIRED INFORMATION.—A person that fails to provide information by a deadline established under this subsection may not provide the information to be

part of the record of any subsequent rulemaking under section 6(a) to regulate the chemical substance or mixture unless the person demonstrates that the information could not reasonably have been made available to the Administrator by the deadlines established under this subsection.

"(g) INFORMATION COLLECTION UNDER THE LRTAP POPs PROTOCOL.—

"(1) RISK PROFILE IN SUPPORT OF PROPOSED AMENDMENT TO LIST.—

"(A) PUBLICATION OF NOTICE IN FEDERAL REGISTER.—As soon as practicable after the date of submission to the Executive Body of a risk profile in support of a proposed amendment to list a chemical substance or mixture in Annex I, II, or III to the LRTAP POPs Protocol, the Administrator shall publish in the Federal Register a notice that—

"(i) identifies the chemical substance or mixture; and

"(ii) summarizes the risk profile for the chemical substance or mixture.

"(B) PROVISION OF INFORMATION TO THE ADMINISTRATOR.—Not later than 60 days after the date of publication of the notice under sub-

paragraph (A), any person that manufactures, processes, or distributes in commerce a chemical substance or mixture that is the subject of the notice shall provide to the Administrator all of the following information that is known or reasonably ascertainable to the person:

"(i) The potential for long-range transboundary atmospheric transport of the chemical substance or mixture.

"(ii) The toxicity of the chemical substance or mixture.

"(iii) The persistence of the chemical substance or mixture, including biotic degradation processes and rates and degradation products.

"(iv) The bioaccumulation of the chemical substance or mixture, including bioavailability.

"(v) The annual quantity of the chemical substance or mixture manufactured and the locations of the manufacture.

"(vi) The uses of the chemical substance or mixture.

"(vii) The annual quantity of the chemical substance or mixture that enters each environmental medium.

"(viii) Environmental monitoring data relating to the chemical substance or mixture (in areas distant from sources).

"(ix)(I) Information on alternatives to the uses of the chemical substance or mixture and the efficacy of each alternative.

"(II) Information on any known adverse environmental or human health effects associated with each alternative.

"(x) Information on—

"(I) process changes, control technologies, operating practices, and other pollution prevention techniques that can be used to reduce the emissions of the chemical substance or mixture; and

"(II) the applicability and effectiveness of each technique described in subclause (I).

"(xi) Information on the nonmonetary costs and benefits and the quantifiable costs and benefits associated with the use

of each alternative described in clause (ix) or technique described in clause (x).

"(C) UPDATING OF INFORMATION.—The information provided under subparagraph (B) shall be updated on an annual basis until such time as—

"(i) the parties to the LRTAP POPs Protocol decide not to list the chemical substance or mixture in any Annex to the LRTAP POPs Protocol; or

"(ii) the Administrator, with the concurrence of the Secretary of State, determines that such updates are no longer necessary.

"(D) REPORT BY ADMINISTRATOR TO SECRETARY OF STATE.—Based on information received under this paragraph and any other relevant information available to the Administrator, the Administrator, not later than 180 days after the date of publication of the notice under subparagraph (A), shall submit to the Secretary of State a report that contains, at a minimum—

"(i) information on the production and uses in the United States of the chemical substance or mixture; and

"(ii) an assessment of the benefits and risks associated with the production and uses in the United States of the chemical substance or mixture.

"(2) APPLICABILITY OF INFORMATION REQUIREMENTS.—The information requirements of this subsection shall not apply to a person subject to the requirements to the extent that the person has actual knowledge that the Administrator has been adequately informed of any of the information required to be provided under this subsection.

"(3) EFFECT OF FAILURE TO SUBMIT REQUIRED INFORMATION.—A person that fails to submit information by a deadline established under this subsection may not submit the information to be part of the record of any subsequent rulemaking under section 6(a) to regulate the chemical substance or mixture unless the person demonstrates that the information could not reasonably have been made available to the Administrator by the deadlines established under this subsection.".

SEC. 104. INTERNATIONAL CONVENTIONS AND COOPERATION IN INTERNATIONAL EFFORTS.

(a) IN GENERAL.—Section 9 of the Toxic Substances Control Act (15 U.S.C. 2608) is amended—

(1) in the section heading, by inserting "; **INTERNATIONAL CONVENTIONS**" before the period at the end; and

(2) by adding at the end the following:

"(e) INTERNATIONAL CONVENTIONS AND COOPERATION IN INTERNATIONAL EFFORTS.—In cooperation with the Secretary of State and the head of any other appropriate Federal agency, the Administrator shall—

"(1) participate and cooperate in any international efforts to develop improved research and regulations on chemical substances and mixtures; and

"(2) participate in technical cooperation and capacity building activities designed to support implementation of—

"(A) the LRTAP POPs Protocol;

"(B) the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, done at Rotterdam on September 10, 1998; and

"(C) the POPs Convention.".

(b) CONFORMING AMENDMENT.—The table of contents in section 1 of the Toxic Substances Control Act (15 U.S.C. prec. 2601) is amended by striking the item relating to section 9 and inserting the following:

"Sec. 9. Relationship to other Federal laws; international conventions.".

SEC. 105. EXPORTS.

Section 12(a) of the Toxic Substances Control Act (15 U.S.C. 2611(a)) is amended by striking paragraph (2) and inserting the following:

"(2) SUBSTANCES THAT PRESENT UNREASONABLE RISK OF INJURY TO HEALTH OR THE ENVIRONMENT IN THE UNITED STATES.—

"(A) IN GENERAL.—Paragraph (1) shall not apply to—

"(i) any chemical substance, mixture, or article if the Administrator finds that the substance, mixture, or article will present an unreasonable risk of injury to health within the United States or to the environment of the United States; or

"(ii) any chemical substance or mixture with respect to which manufacture, processing, distribution in commerce, use, or disposal is prohibited or restricted under subsection (f) or (g) of section 6.

"(B) REQUIREMENT FOR TESTING.—The Administrator may require, under section 4, testing of any chemical substance or mixture exempted from this Act by paragraph (1) for the purpose of determining whether the substance or mixture presents an unreasonable risk of injury described in subparagraph (A)(i).".

SEC. 106. PROHIBITED ACTS.

Section 15 of the Toxic Substances Control Act (15 U.S.C. 2614) is amended by striking paragraphs (3) and (4) and inserting the following:

"(3) fail or refuse—

"(A) to establish or maintain records;

"(B) to submit reports, notices, or other information; or

"(C) to permit access to or copying of records;

as required by this Act (including regulations promulgated under this Act);

"(4) fail or refuse to permit entry or inspection as required by section 11; or

"(5) fail or refuse to comply with section 12 or 13 (including regulations promulgated under those sections).".

SEC. 107. RESEARCH PROGRAM TO SUPPORT POPS CONVENTION.

(a) DEFINITIONS.—In this section:

(1) ACADEMY.—The term "Academy" means the National Academy of Sciences.

(2) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Environmental Protection Agency.

(3) CONTRACT.—The term "contract" means a contract entered into between the Academy and Administrator to carry out this section.

(4) LRTAP POPS PROTOCOL.—The term "LRTAP POPs Protocol" means the Protocol on Persistent Organic Pollutants to the LRTAP Convention, done at Aarhus on June 24, 1998.

(5) PERSISTENT, BIOACCUMULATIVE TOXIC SUBSTANCE.—The terms "persistent, bioaccumulative toxic substance" and "PBT substance" mean a toxic, long-lasting substance that has the potential to accumulate in the food chain to a level that is harmful to current and future human and ecosystem health.

(6) POPS CHEMICAL SUBSTANCE OR MIXTURE.—The term "POPs chemical substance or mixture" has the meaning given the term in section

3 of the Toxic Substances Control Act (15 U.S.C. 2602) (as amended by section 101).

(7) POPS CONVENTION.—The term "POPS Convention" means the Stockholm Convention on Persistent Organic Pollutants, done at Stockholm on May 22, 2001.

(b) CONTRACT.—The Administrator may offer to enter into a contract with the Academy to conduct a research program in support of the POPs Convention.

(c) SCREENING OF CHEMICAL SUBSTANCES OR MIXTURES.—Using the criteria of persistence, bioaccumulation, capacity for long-range transport, and toxicity (as defined in Annex D to the POPs Convention), the contract shall require the Academy—

(1) to screen a wide range of potential POPs chemical substances or mixtures; and

(2) to provide scientific data and recommendations for those chemicals substances or mixtures that should be nominated for addition to the POPs Convention, in order of priority.

(d) REQUIRED ACTIVITIES.—To carry out this section, the contract shall require the Academy—

(1) to develop and apply screening criteria for adding new substances or mixtures to the POPs

Convention, including review of proposed models, testing methods, and data compilations;

(2) to propose alternative designs for a global monitoring program aimed at identifying persistent and bioaccumulative chemical substances or mixtures in the environment, and potential mechanisms for implementation of the designs; and

(3) to recommend priority candidate POPs chemical substances or mixtures for possible nomination to the Persistent Organic Pollutants Review Committee established under paragraph 6 of Article 19 of the POPs Convention.

(e) SCREENING FOR CANDIDATE POPS CHEMICAL SUBSTANCES OR MIXTURES.—

(1) IN GENERAL.—In selecting potential POPS chemical substances or mixtures for screening and monitoring, the contract shall require the Academy to pay particular attention to chemical substances or mixtures that—

(A) display the characteristics of POPS chemical substances or mixtures;

(B) are not listed in Annex A or B to the POPs Convention as of the date of enactment of this Act; and

(C) are being addressed or considered in other international forums.

(2) INCLUSIONS.—Chemical substances or mixtures that are covered by paragraph (1) include—

(A) chlordecone, hexabromobiphenyl, HCH (lindane), and polyaromatic hydrocarbons, which are listed in Annex I or II to the LRTAP POPs Protocol as of the date of enactment of this Act;

(B) pentabromodiphenyl ether (PeBDE), dicofol, hexachlorobutadiene, pentachlorobenzene, and polychlorinated naphthalenes (PCNs), which are being considered (as of the date of enactment of this Act) by an expert group for listing in Annex I or II to the LRTAP POPs Protocol;

(C) endosulfan, octyl and decyl phenols and trichlorobenzenes, and other substances on the list of 14 priority substances submitted by the DYNAMEC committee to the Oslo-Paris Commission;

(D) polybrominated diphenylethers (PBDEs), methylmercury, and tributyltin compounds, which are being considered (as of the date of enactment of this Act) under the

UNEP/GEF Regionally Based Assessment of Persistent Toxic Substances Project;

(E) perfluorooctyl sulfonyl fluoride (POSF) and other chemicals that can degrade to perfluoroctanoyl sulphonate (PFOS), for which an in-depth risk assessment by the OECD Chemicals Programme is being carried out as of the date of enactment of this Act;

(F) pentachlorophenol (PCP), which is the subject of an International Declaration that—

(i) was signed in 1998 by a number of Parties to the LRTAP POPs Protocol; and

(ii) states that PCP use should be "tightly controlled to minimize emissions to the environment";

(G) short-chain chlorinated paraffins (SCCPs), which—

(i) are the subject of an International Declaration that was signed in 1998 by a number of Parties to the LRTAP POPs Protocol; and

(ii) has "the objective of controlling and limiting the risks arising from the dispersive uses of short-chain chlorinated

paraffins using appropriate national and/or international procedures";

(H) octachlorostyrene, which—

(i) is structurally similar to hexachlorobenzene, a POPs chemical substance or mixture listed in Annex A to the POPs Convention; and

(ii) can reasonably be anticipated to have a similar toxicological profile to hexachlorobenzene; and

(I) tetrachlorobenzene, which studies demonstrate is likely to meet the persistence and bioaccumulation criteria of the POPs Convention.

(f) MONITORING STRATEGIES FOR PERSISTENT AND BIOACCUMULATIVE SUBSTANCES.—The contract shall require the Academy—

(1) to pay special attention to persistent and bioaccumulating substances;

(2) to develop new strategies to search more broadly for persistent and bioaccumulative substances in the environment in a manner that combines selections of sample sites, sample media, and sampling methods; and

(3) to explore the implementation of the new strategies.

(g) SUBMISSION OF REPORT.—Not later than January 1, 2004, the contract shall require the Academy to submit to the Committee on Environment and Public Works of the Senate, the Committee on Energy and Commerce of the House of Representatives, and the Administrator a report on the research program conducted under this section.

(h) COMPLETION OF EPA DIOXIN REASSESSMENT.—Not later than 90 days after the date of enactment of this Act, the Administrator shall submit to the Committee on Environment and Public Works of the Senate and the Committee on Energy and Commerce of the House of Representatives the final exposure and human health reassessment by the Administrator of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and related compounds.

(i) PERSISTENT, BIOACCUMULATIVE TOXIC SUBSTANCES STRATEGY.—

(1) REPORT.—Not later than 1 year after the date of enactment of this Act, the Administrator shall develop and submit to the Committee on Environment and Public Works of the Senate and the Committee on Energy and Commerce of the House

of Representatives a report that describes a strategy that will reduce public exposure to persistent, bioaccumulative toxic substances.

(2) REQUIREMENTS.—The strategy shall—

(A) develop and implement national action plans to reduce priority PBT substances, using the full range of tools available to the Administrator;

(B) screen and select more priority PBT substances for action;

(C) prevent new PBT substances from entering the marketplace;

(D) use the resources of the Environmental Protection Agency and other Federal agencies to identify or develop substitutes to PBT substances;

(E) measure progress in carrying out actions under the strategy against the goals and national commitments of the Environmental Protection Agency under the Government Performance and Results Act of 1993 (Public Law 103–62) and amendments made by that Act;

(F) include recommendations for amendments to regulations in effect on the date of enactment of this Act under the Toxic Release In-

ventory under the Emergency Planning and Community Right-To-Know Act of 1986 (42 U.S.C. 11001 et seq.), the Toxic Substances Control Act (15 U.S.C. 2601 et seq.), and programs conducted under other laws that will reduce public and ecosystem exposure to PBT substances; and

(G) identify the amount and sources of—

(i) funds used as of the date of enactment of this Act for reducing exposure to, and researching the effects of, PBT substances; and

(ii) funds necessary to implement subparagraphs (A), (B) and (C) during the 5-year period beginning on the date of enactment of this Act.

(3) COORDINATION.—In developing the strategy, the Administrator shall consult with representatives of States, public interest groups, environmental health agencies, and other Federal agencies with expertise in public and ecosystem health.

TITLE II—USE OR PRODUCTION OF POPS PESTICIDES

SEC. 201. DEFINITIONS.

Section 2 of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136) is amended—

(1) by striking subsection (bb) and inserting the following:

"(bb) UNREASONABLE ADVERSE EFFECT ON THE ENVIRONMENT.—

"(1) IN GENERAL.—The term 'unreasonable adverse effect on the environment', with respect to a pesticide, means—

"(A) any unreasonable risk to humans or the environment, taking into account the economic, social, and environmental costs and benefits of the use of the pesticide;

"(B) a human dietary risk from a residue that results from a use of the pesticide in or on any food inconsistent with the standard established under section 408 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 346a); or

"(C) any production or use of the pesticide that is inconsistent with an amendment to Annex A or B to the POPs Convention as adopted by the Conference, or an amendment to

Annex I or II to the LRTAP POPs Protocol as adopted by the Executive Body, unless the production or use of the pesticide is necessary—

"(i) to prevent significant adverse effects on human health or the environment that would pose significantly greater risks than the risks associated with the production or use of the pesticide; or

"(ii) to avoid a significant disruption in domestic production of an adequate, wholesome, and economical food supply.

"(2) PUBLIC HEALTH PESTICIDES.—

"(A) IN GENERAL.—The Administrator shall consider the risks and benefits of public health pesticides separately from the risks and benefits of other pesticides.

"(B) HEALTH RISKS.—In weighing any regulatory action concerning a public health pesticide under this Act, the Administrator shall weigh any risks of the public health pesticide against the health risks (such as the diseases transmitted by the vector) to be controlled by the public health pesticide."; and

(2) by adding at the end the following:

"(pp) CONFERENCE.—The term 'Conference' means the Conference of the Parties established by paragraph 1 of Article 19 of the POPs Convention.

"(qq) EXECUTIVE BODY.—The term 'Executive Body' means the Executive Body established by Article 10 of the LRTAP Convention.

"(rr) LRTAP CONVENTION.—The term 'LRTAP Convention' means the Convention on Long-Range Transboundary Air Pollution, done at Geneva on November 13, 1979 (TIAS 10541).

"(ss) LRTAP POPs PESTICIDE.—The term 'LRTAP POPs pesticide' means any pesticide or active ingredient—

"(1) used in producing a pesticide that—

"(A) is listed in Annex I or II to the LRTAP POPs Protocol; but

"(B) is not listed in Annex A or B to the POPs Convention; and

"(2) with respect to which the listing in Annex I or II to the LRTAP POPs Protocol has entered into force with respect to the United States under paragraph 3 of Article 14 of the LRTAP POPs Protocol.

"(tt) LRTAP POPs PROTOCOL.—The term 'LRTAP POPs Protocol' means the Protocol on Persistent Organic

Pollutants to the LRTAP Convention, done at Aarhus on June 24, 1998.

"(uu) POPs CONVENTION.—The term 'POPs Convention' means the Stockholm Convention on Persistent Organic Pollutants, done at Stockholm on May 22, 2001.

"(vv) POPs PESTICIDE.—The term 'POPs pesticide' means—

"(1) aldrin;

"(2) chlordane;

"(3) dichlorodiphenyltrichloroethane (DDT);

"(4) dieldrin;

"(5) endrin;

"(6) heptachlor;

"(7) hexachlorobenzene;

"(8) mirex;

"(9) toxaphene; and

"(10) any other pesticide or active ingredient used in producing a pesticide—

"(A) that is listed in Annex A or B to the POPs Convention; and

"(B) with respect to which an amendment adding the pesticide or active ingredient used in producing a pesticide to Annex A or B to the POPs Convention has entered into force with

respect to the United States under paragraph 4 of Article 22 of the POPs Convention.

"(ww) POPS REVIEW COMMITTEE.—The term 'POPs Review Committee' means the Persistent Organic Pollutants Review Committee established under paragraph 6 of Article 19 of the POPs Convention.".

SEC. 202. REGISTRATION OF PESTICIDES.

Section 3 of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136a) is amended by striking subsection (b) and inserting the following:

"(b) EXEMPTIONS.—

"(1) IN GENERAL.—Except as provided in paragraph (2), any pesticide that is not registered with the Administrator may be transferred if—

"(A) the transfer is from 1 registered establishment to a second registered establishment operated by the same producer solely for—

"(i) packaging at the second establishment; or

"(ii) use as a constituent part of another pesticide at the second establishment; or

"(B) the transfer is in accordance with the requirements of an experimental use permit.

"(2) POPs PESTICIDES.—Paragraph (1) shall not apply to a POPs pesticide or LRTAP POPs pesticide unless the POPs pesticide or LRTAP POPs pesticide is permitted to be transferred under any applicable exemption under subsection (e)(3) or (f)(3) of section 17.".

SEC. 203. UNLAWFUL ACTS.

Section 12(a)(2) of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136j(a)(2)) is amended—

(1) in subparagraph (R), by striking "or" at the end;

(2) in subparagraph (S), by striking the period at the end and inserting "; or"; and

(3) by adding at the end the following:

"(T) to violate section 17.".

SEC. 204. IMPORTS, EXPORTS, AND INTERNATIONAL CONVENTIONS.

(a) PESTICIDES AND DEVICES INTENDED FOR EXPORT.—Section 17(a) of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136o(a)) is amended in the first sentence—

(1) in paragraph (1), by striking "and" at the end;

(2) in paragraph (2), by striking the period at the end and inserting "; and"; and

(3) by adding at the end the following:

"(3) if the export is in compliance with this section.".

(b) IMPORTS OF PESTICIDES AND DEVICES.—Section 17(c) of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136o(c)) is amended by adding at the end the following: "Nothing in this subsection authorizes the import of any POPs pesticide that is prohibited under subsection (e).".

(c) INTERNATIONAL CONVENTIONS AND COOPERATION IN INTERNATIONAL EFFORTS.—Section 17 of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136o) is amended—

(1) in subsection (d)—

(A) by striking "agency, participate" and inserting "agency—

"(1) participate";

(B) by striking the period at the end and inserting "; and"; and

(C) by adding at the end the following:

"(2) participate in technical cooperation and capacity building activities designed to support implementation of—

"(A) the LRTAP POPs Protocol;

"(B) the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, done at Rotterdam on September 10, 1998; and

"(C) the POPs Convention.";

(2) by redesignating subsection (e) as subsection (h); and

(3) by inserting after subsection (d) the following:

"(e) POPs CONVENTION.—

"(1) PROHIBITION ON SPECIFIED POPS PESTICIDES.—Subject to paragraph (3) and the POPs Convention, notwithstanding any other provision of law, a person shall not sell, distribute, use, produce, or conduct any disposal operation that may lead to recovery, recycling, reclamation, reuse, or an alternative use of a POPs pesticide specified in any of paragraphs (1) through (9) of section 2(vv).

"(2) PROHIBITION ON OTHER POPS PESTICIDES.—

"(A) IN GENERAL.—Subject to paragraph (3), notwithstanding any other provision of law, a person shall not use, produce, or conduct any

disposal operation that may lead to recovery, recycling, reclamation, reuse, or an alternative use of a POPs pesticide described in section 2(vv)(10) that—

"(i) is not subject to paragraph (1); and

"(ii) meets a condition described in subparagraph (B).

"(B) CANCELLATION OR STATEMENT OF COMPLIANCE.—

"(i) IN GENERAL.—The condition referred to in subparagraph (A)(ii) is that, in accordance with this Act, the Administrator, with the concurrence of the Secretary of State—

"(I) subject to clause (ii), cancels under section 6 any existing registration that the Administrator determines would prevent the United States from complying with the obligations of the United States under the POPs Convention if the United States were to become a party to the POPs Convention with respect to the POPs pesticide; or

"(II) after providing notice and an opportunity for comment—

"(aa) issues a statement that there are no existing registrations for the POPs pesticide that would prevent the United States from complying with the obligations of the United States under the POPs Convention; and

"(bb) in the statement, identifies any uses of the POPs pesticide permitted in the United States that would not prevent the United States from complying with the obligations of the United States under the POPs Convention.

"(ii) EFFECTIVE DATE OF CANCELLATION.—An action under clause (i)(I) and section 6 based on a finding of the Administrator that production or use of a POPs pesticide would result in an unreasonable adverse effect on the environment because of an inconsistency with an amendment to Annex A or B to the POPs Convention

shall not become effective until such time as the amendment enters into force with respect to the United States under paragraph 4 of Article 22 of the POPs Convention.

"(3) EXEMPTIONS.—

"(A) EXEMPTIONS UNDER POPS CONVENTION.—To the extent consistent with the POPs Convention, the prohibitions specified in paragraphs (1) and (2) shall not apply to any sale, distribution, use, or production of a POPs pesticide that the Administrator determines, through a cancellation order issued under section 6 or a statement issued under paragraph (2)(B)(i)(II)—

"(i) is consistent with—

"(I) a production or use specific exemption under Annex A or B to the POPs Convention; or

"(II) an acceptable purpose available to the United States under Annex B to the POPs Convention; and

"(ii) would, as a result, not prevent the United States from complying with the

obligations of the United States under the POPs Convention.

"(B) UNINTENTIONAL TRACE CONTAMINANTS.—To the extent consistent with the POPs Convention, the prohibitions specified in paragraphs (1) and (2) shall not apply to any quantity of a POPs pesticide that occurs as an unintentional trace contaminant in an article.

"(C) RESEARCH.—To the extent consistent with the POPs Convention, the prohibitions specified in paragraphs (1) and (2) shall not apply to any quantity of a POPs pesticide that is used for laboratory scale research or as a reference standard.

"(D) CONSTITUENT OF ARTICLE IN USE BEFORE PROHIBITION APPLIED.—To the extent consistent with the POPs Convention, the prohibitions specified in paragraphs (1) and (2) shall not apply to any quantity of a POPs pesticide that occurs as a constituent of an article, if—

"(i) the article is manufactured or in use on or before the date of entry into force of the obligation applicable to the POPs pesticide; and

"(ii) the Administrator has met any applicable requirement of the POPs Convention to notify the Secretariat of the POPs Convention concerning the article.

"(E) DISTRIBUTION FOR EXPORT IF PRODUCTION OR USE SPECIFIC EXEMPTION OR ACCEPTABLE PURPOSE IS IN EFFECT.—

"(i) IN GENERAL.—To the extent consistent with the POPs Convention, the prohibitions specified in paragraphs (1) and (2) shall not apply to any distribution for export of any POPs pesticide for which a production or use specific exemption under Annex A to the POPs Convention is in effect, or for which a production or use specific exemption or acceptable purpose under Annex B to the POPs Convention is in effect, if the POPs pesticide complies with an export condition described in clause (ii), (iii), or (iv).

"(ii) EXPORT FOR ENVIRONMENTALLY SOUND DISPOSAL.—An export condition referred to in clause (i) is that the POPs pesticide is exported for the purpose of environmentally sound disposal in accordance

with paragraph 1(d) of Article 6 of the POPs Convention.

"(iii) EXPORT TO PARTY WITH PERMISSION TO USE.—An export condition referred to in clause (i) is that the POPs pesticide is exported to a party to the POPs Convention that is permitted to use the POPs pesticide under Annex A or B to the POPs Convention.

"(iv) EXPORT TO NONPARTY IN ACCORDANCE WITH NONPARTY CERTIFICATION.—

"(I) IN GENERAL.—An export condition referred to in clause (i) is that the POPs pesticide is exported, to an importing country that is not a party to the POPs Convention with respect to the POPs pesticide, for sale, distribution, or use in accordance with a complete and accurate nonparty certification that the importing country annually provides to the Administrator.

"(II) COMMITMENTS BY IMPORTING NONPARTY.—Consistent with the

POPs Convention, an annual nonparty certification under subclause (I) shall specify the intended use of the POPs pesticide and state that, with respect to the POPs pesticide, the importing nonparty is committed to—

"(aa) protecting human health and the environment by taking necessary measures to minimize or prevent releases;

"(bb) complying with paragraph 1 of Article 6 of the POPs Convention; and

"(cc) complying, to the extent appropriate, with paragraph 2 of Part II of Annex B to the POPs Convention.

"(III) SUPPORTING DOCUMENTATION.—Each nonparty certification shall include any appropriate supporting documentation, such as legislation, regulatory instruments, and administrative or policy guidelines.

"(IV) SUBMISSION TO SECRETARIAT OF POPS CONVENTION.—Not later than 60 days after the date of receipt of a complete nonparty certification, the Administrator shall submit a copy of the nonparty certification to the Secretariat of the POPs Convention.

"(F) EXPORT FOR ENVIRONMENTALLY SOUND DISPOSAL IF NO PRODUCTION OR USE SPECIFIC EXEMPTION IN EFFECT.—To the extent consistent with the POPs Convention, the prohibitions specified in paragraphs (1) and (2) shall not apply to any distribution for export for the purpose of environmentally sound disposal, in accordance with paragraph 1(d) of Article 6 of the POPs Convention, of a POPs pesticide listed in Annex A to the POPs Convention for which no production or use specific exemption is in effect for any party to the POPs Convention.

"(G) IMPORTS FOR SPECIFIED PURPOSES.—To the extent consistent with the POPs Convention, the prohibitions specified in paragraphs (1) and (2) shall not apply to any

distribution of a POPs pesticide that is imported—

"(i) for the purpose of environmentally sound disposal in accordance with paragraph 1(d) of Article 6 of the POPs Convention; or

"(ii) for a purpose authorized under a cancellation order issued under section 6.

"(H) NO EFFECT ON OTHER PROHIBITIONS.—Nothing in this paragraph authorizes any sale, distribution, use, or production, or any disposal operation, that may lead to recovery, recycling, reclamation, reuse, or an alternative use, of any POPs pesticide that is prohibited under any other provision of law.

"(4) CERTIFICATION STATEMENT ACCOMPANYING POPS PESTICIDES.—

"(A) IN GENERAL.—Each POPs pesticide that is sold or distributed under subparagraph (A), (C), (E), (F), or (G) of paragraph (3) shall be accompanied by a certification statement.

"(B) PERSON REQUIRED TO PREPARE.—A certification statement required by subparagraph (A) shall be prepared—

"(i) by the producer of the POPs pesticide; or

"(ii) if there is no certification statement accompanying the POPs pesticide, by any person that sells or distributes the POPs pesticide.

"(C) REQUIRED ELEMENTS.—The certification statement shall contain—

"(i) a specification of the quantity and identity of the POPs pesticide;

"(ii) the basis for application of subparagraph (A), (C), (E), (F), or (G) of paragraph (3); and

"(iii) such other information as the Administrator determines to be necessary for effective enforcement of this subsection.

"(D) DUTIES OF SELLERS AND DISTRIBUTORS.—Any person that sells or distributes the POPs pesticide shall ensure that—

"(i) the certification statement accompanies the POPs pesticide when the POPs pesticide is sold or distributed; and

"(ii) the sale or distribution is consistent with the certification statement.

"(E) MAINTENANCE OF CERTIFICATION STATEMENT.—A person that prepares a certification statement shall maintain a copy of the certification statement for a period of not less than 3 years beginning on the date on which the certification statement is prepared.

"(F) REGULATIONS.—The Administrator may promulgate such regulations as are necessary—

"(i) to facilitate implementation of this paragraph; and

"(ii) to ensure that this paragraph is implemented in compliance with the POPs Convention.

"(5) SUBMISSION OF INFORMATION.—

"(A) PROPOSAL FOR LISTING MEETS POPS CONVENTION SCREENING CRITERIA.—

"(i) PUBLICATION OF NOTICE IN FEDERAL REGISTER.—As soon as practicable after the date of a determination by the POPs Review Committee that a proposal for listing a pesticide in Annex A, B, or C to the POPs Convention meets the screening criteria specified in Annex D to the POPs Convention, the Administrator shall

publish in the Federal Register a notice that—

"(I) identifies the pesticide; and

"(II) summarizes the determination of the POPs Review Committee.

"(ii) PROVISION OF ARGUMENTS OR INFORMATION TO THE ADMINISTRATOR.—Not later than 60 days after the date of publication of the notice under clause (i), any registrant of the pesticide or other interested person that might support or object to any listing of the pesticide in Annex A, B, or C to the POPs Convention may provide to the Administrator any arguments or information associated with the risks or benefits of use of the pesticide (including information specified in Annex D or E to the POPs Convention) that, in the opinion of the registrant or other interested person, supports a determination that—

"(I) the determination by the POPs Review Committee is incorrect; or

"(II) any or all uses of the pesticide in the United States do or do not result in any unreasonable adverse effect on the environment.

"(iii) PROVISION OF ADDITIONAL INFORMATION.—If a registrant or other interested person obtains, after the deadline established under clause (ii), additional information that was not available to the registrant or other interested person by the deadline, the registrant or other interested person may provide to the Administrator the additional information, and arguments based on the additional information, not later than 60 days after the date of acquisition by the registrant or other interested person of the additional information.

"(iv) REPORT BY ADMINISTRATOR TO SECRETARY OF STATE.—Based on information received under this paragraph and any other relevant information available to the Administrator, the Administrator, not later than 180 days after the date of publication of the notice under clause (i), shall

submit to the Secretary of State a report that contains, at a minimum—

"(I) information on the registered uses in the United States of the pesticide; and

"(II) an assessment of the benefits and risks associated with the uses in the United States of the pesticide.

"(B) DECISION TO PROCEED WITH LISTING PROCESS.—

"(i) PUBLICATION OF NOTICE IN FEDERAL REGISTER.—If the POPs Review Committee decides under paragraph 7 of Article 8 of the POPs Convention that a proposal for listing a pesticide shall proceed, the Administrator shall publish in the Federal Register a notice that—

"(I) identifies the pesticide; and

"(II) summarizes the decision of the POPs Review Committee.

"(ii) PROVISION OF INFORMATION BY INTERESTED PERSONS.—Not later than 60 days after the date of publication of the notice under clause (i), any person interested in a pesticide that is the subject of

the notice may provide to the Administrator—

"(I) consistent with the information needs described in Annex F to the POPs Convention, any information that the person believes is relevant to—

"(aa) a risk management evaluation carried out under paragraph 7 of Article 8 of the POPs Convention;

"(bb) a decision by the Conference under paragraph 9 of Article 8 of the POPs Convention; or

"(cc) an action under section 6(b); and

"(II) information on any article in use that consists of, contains, or is contaminated with the pesticide.

"(C) EFFECT OF FAILURE TO SUBMIT INFORMATION.—If an argument or item of information is not submitted by a deadline established under this paragraph, a person may not raise the argument or submit the information in

any subsequent cancellation proceeding initiated by the Administrator under section 6 in response to a listing decision by the Conference unless the person that seeks to raise the argument or submit the information demonstrates that the argument or information could not reasonably have been made available to the Administrator by the deadlines established under this paragraph.

"(f) LRTAP POPs PROTOCOL.—

"(1) PROHIBITION ON SPECIFIED LRTAP POPS PESTICIDES.—

"(A) IN GENERAL.—Subject to subparagraph (B), paragraph (3), and the LRTAP POPs Protocol, notwithstanding any other provision of law, a person shall not sell, distribute, use, produce, or conduct any disposal operation that may lead to recovery, recycling, reclamation, reuse, or an alternative use of any of the following LRTAP POPs pesticides:

"(i) Chlordecone.

"(ii) Hexabromobiphenyl.

"(iii) Hexachlorocyclohexane (HCH).

"(B) ADDITION TO ANNEX A OR B TO POPS CONVENTION.—If a LRTAP POPs pesticide

specified in subparagraph (A) is added to Annex A or B to the POPs Convention and the amendment making the addition enters into force with respect to the United States under paragraph 4 of Article 22 of the POPs Convention—

"(i) subparagraph (A) shall not apply to the LRTAP POPs pesticide; and

"(ii) the LRTAP POPs pesticide shall be subject to subsection (e).

"(2) PROHIBITION ON OTHER LRTAP POPS PESTICIDES.—

"(A) IN GENERAL.—Subject to paragraph (3), notwithstanding any other provision of law, a person shall not sell, distribute, use, or produce a LRTAP POPs pesticide that—

"(i) is not subject to paragraph (1); and

"(ii) meets a condition described in subparagraph (B).

"(B) CANCELLATION OR STATEMENT OF COMPLIANCE.—

"(i) IN GENERAL.—The condition referred to in subparagraph (A)(ii) is that, in accordance with this Act, the Adminis-

trator, with the concurrence of the Secretary of State—

"(I) subject to clause (ii), cancels under section 6 any existing registration that the Administrator determines would prevent the United States from complying with the obligations of the United States under the LRTAP POPs Protocol if the United States were to become a party to the LRTAP POPs Protocol for the LRTAP POPs pesticide; or

"(II) after providing notice and an opportunity for comment—

"(aa) issues a statement that there are no existing registrations for the LRTAP POPs pesticide that would prevent the United States from complying with the obligations of the United States under the LRTAP POPs Protocol; and

"(bb) in the statement, identifies any uses of the LRTAP POPs pesticide permitted in the

United States that would not prevent the United States from complying with the obligations of the United States under the POPs Convention.

"(ii) EFFECTIVE DATE OF CANCELLATION.—An action under clause (i)(I) and section 6 based on a finding of the Administrator that production or use of a pesticide would result in an unreasonable adverse effect on the environment because of an inconsistency with an amendment to Annex I or II to the LRTAP POPs Protocol shall not become effective until such time as the amendment enters into force with respect to the United States under paragraph 3 of Article 14 of the LRTAP POPs Protocol.

"(3) EXEMPTIONS.—

"(A) IN GENERAL.—To the extent consistent with the LRTAP POPs Protocol, the prohibitions specified in paragraphs (1) and (2) shall not apply to—

"(i) any sale, distribution, use, or production of a LRTAP POPs pesticide that

the Administrator determines, through a cancellation order issued under section 6 or a statement issued under paragraph (2)(B)(i)(II)—

"(I) is consistent with an exemption available to the United States under Annex I or II to the LRTAP POPs Protocol; and

"(II) would, as a result, not prevent the United States from complying with the obligations of the United States under the LRTAP POPs Protocol;

"(ii) any quantity of a LRTAP POPs pesticide that is used for laboratory scale research or as a reference standard;

"(iii) any quantity of a LRTAP POPs pesticide that occurs as a contaminant in an article;

"(iv) any quantity of a LRTAP POPs pesticide that is in an article manufactured or in use on or before—

"(I) the implementation date of the LRTAP POPs Protocol; or

"(II) in the case of any LRTAP POPs pesticide added to any applicable Annex after the implementation date of the LRTAP POPs Protocol, the implementation date of the amendment to the LRTAP POPs Protocol that makes the addition; or

"(v) the production or use of any quantity of hexachlorocyclohexane (HCH) that complies with the restrictions and conditions specified for HCH in Annex II to the LRTAP POPs Protocol.

"(B) PETITIONS FOR EXEMPTIONS AUTHORIZED BY LRTAP POPS PROTOCOL.—

"(i) IN GENERAL.—A person may petition the Administrator for an exemption from a prohibition specified in paragraph (1) or (2) that is consistent with the exemptions authorized under paragraph 2 of Article 4 of the LRTAP POPs Protocol.

"(ii) REQUIRED ELEMENTS OF PETITIONS.—Any petition under clause (i) shall, at a minimum, contain—

"(I) information relating to each finding, if any, that the Administrator

is required to make under the LRTAP POPs Protocol before granting the exemption; and

"(II) any additional information, if any, that the Administrator is required to provide to the Secretariat of the LRTAP POPs Protocol concerning a granted exemption.

"(iii) GRANT OR DENIAL OF PETITION.—The Administrator, with the concurrence of the Secretary of State, shall—

"(I) if the petition is authorized for the United States under, and is otherwise consistent with, the LRTAP POPs Protocol, grant the petition with such conditions or limitations as are necessary to meet any requirement of the LRTAP POPs Protocol or any other provision of law; or

"(II) deny the petition.

"(iv) PROVISION OF INFORMATION TO SECRETARIAT.—Notwithstanding any other provision of law, if the Administrator grants the petition, the Administrator, not later than 90 days after the date on which

the petition is granted, shall provide the Secretariat of the LRTAP POPs Protocol with the information specified in paragraph 3 of Article 4 of the LRTAP POPs Protocol.

"(v) DISALLOWANCE OF EXEMPTION BY LRTAP POPS PROTOCOL.—

"(I) IN GENERAL.—If, after an exemption has been granted under this subparagraph, the exemption is no longer authorized for the United States under the LRTAP POPs Protocol, it shall be unlawful for any person to sell, distribute, use, or produce a LRTAP POPs pesticide in the manner authorized by the petition.

"(II) PUBLICATION OF NOTICE IN FEDERAL REGISTER.—The Administrator shall publish in the Federal Register a notice announcing the disallowance of any exemption under subclause (I).

"(C) NO EFFECT ON OTHER PROHIBITIONS.—Nothing in this paragraph authorizes any sale, distribution, use, production, or dis-

posal operation that may lead to recovery, recycling, reclamation, reuse, or an alternative use of any LRTAP POPs pesticide that is prohibited under any other provision of law.

"(4) CERTIFICATION STATEMENT ACCOMPANYING LRTAP POPS PESTICIDES.—

"(A) IN GENERAL.—Each LRTAP POPs pesticide that is sold or distributed under subparagraph (A)(i), (A)(ii), or (B) of paragraph (3) shall be accompanied by a certification statement.

"(B) PERSON REQUIRED TO PREPARE.—A certification statement required by subparagraph (A) shall be prepared—

"(i) by the producer of the LRTAP POPs pesticide; or

"(ii) if there is no certification statement accompanying the LRTAP POPs pesticide, by any person that sells or distributes the LRTAP POPs pesticide.

"(C) REQUIRED ELEMENTS.—The certification statement shall contain—

"(i) a specification of the quantity and identity of the LRTAP POPs pesticide;

"(ii) the basis for application of subparagraph (A)(i), (A)(ii), or (B) of paragraph (3); and

"(iii) such other information as the Administrator determines to be necessary for effective enforcement of this subsection.

"(D) DUTIES OF SELLERS AND DISTRIBUTORS.—Any person that sells or distributes the LRTAP POPs pesticide shall ensure that—

"(i) the certification statement accompanies the LRTAP POPs pesticide when the LRTAP POPs pesticide is sold or distributed; and

"(ii) the sale or distribution is consistent with the certification statement.

"(E) MAINTENANCE OF CERTIFICATION STATEMENT.—A person that prepares a certification statement shall maintain a copy of the certification statement for a period of not less than 3 years beginning on the date on which the certification statement is prepared.

"(F) REGULATIONS.—The Administrator may promulgate such regulations as are necessary—

"(i) to facilitate implementation of this paragraph; and

"(ii) to ensure that this paragraph is implemented in compliance with the LRTAP POPs Protocol.

"(5) SUBMISSION OF INFORMATION.—

"(A) RISK PROFILE IN SUPPORT OF PROPOSED AMENDMENT TO LIST.—

"(i) PUBLICATION OF NOTICE IN FEDERAL REGISTER.—As soon as practicable after the date of submission to the Executive Body of a risk profile in support of a proposed amendment to list a pesticide in Annex I, II, or III to the LRTAP POPs Protocol, the Administrator shall publish in the Federal Register a notice that—

"(I) identifies the pesticide; and

"(II) summarizes the risk profile for the pesticide.

"(ii) PROVISION OF ARGUMENTS OR INFORMATION TO THE ADMINISTRATOR.—Not later than 60 days after the date of publication of the notice under clause (i), any registrant of the pesticide or other interested person that might support or ob-

ject to any listing of the pesticide in Annex I, II, or III to the LRTAP POPs Protocol may provide to the Administrator any arguments or information associated with the risks or benefits of use of the pesticide that, in the opinion of the registrant or other interested person, supports a determination that—

"(I) the risk profile is incorrect; or

"(II) any or all uses of the pesticide in the United States do or do not result in any unreasonable adverse effect on the environment.

"(iii) PROVISION OF ADDITIONAL INFORMATION.—If a registrant or other interested person obtains, after the deadline established under clause (ii), additional information that was not available to the registrant or other interested person by the deadline, the registrant or other interested person may provide to the Administrator the additional information, and arguments based on the additional information, not later than 60 days after the date of acqui-

sition by the registrant or other interested person of the additional information.

"(iv) REPORT BY ADMINISTRATOR TO SECRETARY OF STATE.—Based on information received under this paragraph and any other relevant information available to the Administrator, the Administrator, not later than 180 days after the date of publication of the notice under clause (i), shall submit to the Secretary of State a report that contains, at a minimum—

"(I) information on the registered uses in the United States of the pesticide; and

"(II) an assessment of the benefits and risks associated with the uses in the United States of the pesticide.

"(B) EFFECT OF FAILURE TO SUBMIT INFORMATION.—If an argument or item of information is not submitted by a deadline established under this paragraph, a person may not raise the argument or submit the information in any subsequent cancellation proceeding initiated by the Administrator under section 6 in response to an amendment to Annex I, II, or III

to the LRTAP POPs Protocol unless the person that seeks to raise the argument or submit the information demonstrates that the argument or information could not reasonably have been made available to the Administrator by the deadlines established under this paragraph.

"(g) NOTICE AND RECORD OF PROHIBITIONS, EXEMPTIONS, DISALLOWANCES, AND OTHER INFORMATION.—

"(1) IN GENERAL.—The Administrator—

"(A) shall publish in the Federal Register timely notice concerning—

"(i)(I) the POPs pesticides subject to the prohibitions specified in subsection (e);

"(II) any exemptions from the prohibitions authorized under subsection (e); and

"(III) any importing country from which any POPs pesticide has received a nonparty certification under subsection (e)(3)(E)(iv); and

"(ii)(I) the LRTAP POPs pesticides subject to the prohibitions specified in subsection (f); and

"(II) any exemptions from the prohibitions authorized under subsection (f), including any disallowances of exemptions under subsection (f)(3)(B)(v); and

"(B) may include in the notice any other information that the Administrator determines to be necessary to ensure adequate notice of the requirements of—

"(i) this section;

"(ii) the POPs Convention; or

"(iii) the LRTAP POPs Protocol.

"(2) INTEGRATION WITH TSCA INFORMATION.—The Administrator shall—

"(A) maintain a record that integrates the information in the notice published under paragraph (1) with any information published under section 6(h) of the Toxic Substances Control Act (15 U.S.C. 2605(h));

"(B) update the record as necessary; and

"(C) make the record publicly available.".

SEC. 205. CONFORMING AMENDMENTS.

The table of contents in section 1(b) of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. prec. 121) is amended—

(1) in the items relating to section 2—

(A) by striking the item relating to subsection (bb) and inserting the following:

"(bb) Unreasonable adverse effect on the environment.
"(1) In general.
"(2) Public health pesticides.";

and

(B) by adding at the end the following:

"(pp) Conference.
"(qq) Executive Body.
"(rr) LRTAP Convention.
"(ss) LRTAP POPs pesticide.
"(tt) LRTAP POPs Protocol.
"(uu) POPs Convention.
"(vv) POPs pesticide.
"(ww) POPs Review Committee.";

(2) in the items relating to section 3, by striking the item relating to subsection (b) and inserting the following:

"(b) Exemptions.
"(1) In general.
"(2) POPs pesticides.";

and

(3) in the items relating to section 17, by striking the items relating to subsection (e) and inserting the following:

"(e) POPs Convention.

"(1) Prohibition on specified POPs pesticides.

"(2) Prohibition on other POPs pesticides.

"(3) Exemptions.

"(4) Certification statement accompanying POPs pesticides.

"(5) Submission of information.

"(f) LRTAP POPs Protocol.

"(1) Prohibition on specified LRTAP POPs pesticides.

"(2) Prohibition on other LRTAP POPs pesticides.

"(3) Exemptions.

"(4) Certification statement accompanying LRTAP POPs pesticides.

"(5) Submission of information.

"(g) Notice and record of prohibitions, exemptions, and other information.

"(1) In general.

"(2) Integration with TSCA information.

"(h) Regulations.".

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